

South Carolina Youth Aquatic Survey

Conducted for the South Carolina Department of Natural Resources

**Conducted by Responsive Management
August 2001**

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EXECUTIVE SUMMARY

The purpose of this study was to assess South Carolina youths' awareness of issues related to aquatic natural resources and recreational fishing. The goal of this study was to gather the data on South Carolina youth in order to assist the South Carolina Department of Natural Resources tailor its youth aquatic programs and services. South Carolina youths' attitudes toward, opinions on, knowledge of, and perceived priorities toward South Carolina aquatic resources and recreational fishing were gathered in this quantitative survey. This study examined fishing initiation, motivation, and fishing participation rates among South Carolina youth. Data were examined for youth 8-18 years old and for their gender and grade-level population subsets.

Fishing Participation

Overall

- A projected 548,847 of the 601,268 youth (91%) between the ages of 8 and 18 in South Carolina had fished at least one time in their lives.
- A projected 370,615 of the 601,268 youth (62%) between the ages of 8 and 18 in South Carolina had fished during the last twelve months.
- Fifty-five percent of all youth in South Carolina fished in freshwater.
- Twenty percent of all youth in South Carolina fished in saltwater.
- The most common reason youth go fishing is to "have fun."
- Youth who had fished within the last twelve months fished an average of 13 days per year.
- Fifty-three percent of youth would go fishing more often if they could.

- The most common reason reported for not fishing more often was "not enough time" (38%).

Gender

- More male youth (94%) than female youth (88%) in South Carolina had fished in their life.
- More male youth (73%) than female youth (60%) had fished in the last twelve months.
- Most all fishing done by youth, who had fished in the last twelve months, regardless of gender, is in freshwater (91% of males and 88% of females).
- Thirty-four percent of males and 29% of females, who had fished in the last twelve months, fished in saltwater.
- The majority of male youth (55%) liked fishing "a lot," whereas the majority of female youth (54%) liked fishing "a little."
- Significantly more male (69%) than female (53%) youth had fished within the past 12 months.
- More male youth (46%) had fished the most recently - reporting having fished "this spring" than female youth (34%).
- Male youth spent considerably more days (17) fishing than female youth (8).
- Large percentages of both male youth (57%) and female youth (47%) anglers wished they could fish more often.
- The most popular reason youth go fishing regardless of gender was "to have fun," reported by 45% of both male and female youth anglers.

- The most common reason reported for both male (41%) and female (35%) youth for not fishing more often was "not enough time."
- When asked specifically what caused respondents to not have enough time, "school" was the only reason given by a majority of male (65%) and female (74%) youth.

Grade

- Most South Carolina youth are introduced to fishing at a young age and those who remain within the sport of fishing become active anglers by grades 9-12.
- Eighty-five percent of youth have fished by the fourth grade.
- More youth in the lower grades (72% for grades 1-4; 69% for grades 5-8; and 64% for grades 9-12) reported having fished in the last twelve months.
- Anglers in grades 1-4 fished an average of 8 days per year; anglers in grades 5-8 fished an average of 12 days per year and, anglers in grades 9-12 fished an average of 15 days per year.
- Youth in grades 1-4 were the most enthusiastic about fishing with 55% reporting liking fishing "a lot," compared to 48% in grades 5-8 and 41% in grades 9-12 who liked fishing "a lot." Youth in the higher grade levels were significantly more reserved in their ratings of liking fishing.
- A greater proportion of youth in grades 1-4 (23% relative to 16% in grades 5-8 and 10% in grades 9-12) indicated they fished "to catch fish." As age increased, "to catch fish" became an ever increasingly unimportant reason for fishing.

- In general, those reasons to fish that had a more naturalistic connotation of "being close to nature" and "to relax" were especially important to higher grade-level youth.

Fishing Initiation

Overall

- Youth fishing occurs almost entirely within the familial context.
- A father or male family member initiates almost all youth into fishing.
- Over two-thirds (67%) of youth were first taught to fish by their father.
- Most youth usually fished with their father (63%), and most youth preferred to fish with their father (51%).

Gender

- Regardless of gender, most youth were first taught to fish by their father. (69% of males and 64% of females).
- Most youth, regardless of gender, reported overwhelmingly that they usually fished with their father (64% of females and 62% of males).
- After father, the second most common fishing companion for male youth (19%) was "friends the same age."
- After father, the second most common fishing companion for female youth (14%) was their mother.
- When asked to consider who respondents would most like to go fishing with, half of both male (52%) and female youth (51%) reported they most preferred to go fishing with their father.

- It appears that though male and female youth liked fishing with friends, had friends who fished, and reported youth their age thought of fishing as "cool," that male youth had slightly stronger opinions, knew more friends who fished and thought of fishing more highly than female youth.

Grade

- The top three fishing companions who taught youth how to fish were the same regardless of grade cohort: a father, grandfather, and an uncle.
- The majority of youth, regardless of grade cohort, usually fished with their father.
- Lower grade-level youth usually fished with immediate family, but as youth grew older their desire to fish with friends either older or of the same age became more apparent.
- Lower grade-level children usually fished with and preferred to fish with family.
- As youth grew older, those who reported fishing with their father, grandfather, and/or mother decreased and those who fished with friends increased.
- Youth in grades 9-12 usually fished with friends more than any other grade cohort and preferred to fish with friends more than any other grade cohort.
- Fishing is viewed as being "cool" most strongly by youth in grades 1-4.

Fishing License and Species Data

Overall

- Twenty-six percent of South Carolina youth between ages 16-18 have purchased a fishing license.

Gender

- A significantly greater proportion of male youth (39%) had purchased a South Carolina fishing license compared to 11% of female youth.
- Most youth, both male (68%) and female (88%), who purchased a fishing license reported that the fact that they had to purchase a fishing license did not restrict them from going fishing.

Interest in Outdoor Recreational Activities and Fishing Clubs

Overall

- Fishing (saltwater and freshwater combined) was the second most popular outdoor recreational activity youth had participated in during the last twelve months.
- Youth were most interested in fishing from a boat (85%) although few actually participated in boating activities.
- A small percentage (11%) of South Carolina youth currently belong to an animal or outdoor club.
- Sixty percent of youth are interested in joining an animal or outdoor club.

Gender

- Both male and female youth reported the same top two outdoor recreational activities participated in during the last twelve months: biking and fishing (saltwater or freshwater).
- When male and female youth were presented with different types of fishing and asked if they were interested in participating in each type of fishing, female youth, in general, showed less interest than male youth in all of the different types of fishing presented to them.
- A significantly greater proportion of male youth (13% relative to 7% of females) indicated that they belonged to an outdoor club.

Grade

- The most popular outdoor recreational activity for grades 1-4 and grades 5-8 was biking.
- The most popular outdoor recreational activity for grades 9-12 was fishing.
- Interest in joining a club to learn about fishing or to learn about South Carolina aquatic habitat was strongest among the youngest grade cohort (grade 1-4) with over three-quarters of youth in grades 1-4 interested in joining an animal or outdoor club.

Awareness of the South Carolina Department of Natural Resources and its Fishing Programs

Overall

- Ten percent of South Carolina youth could correctly identify the South Carolina Department of Natural Resources as the state agency that managed and conserved wildlife.
- Twenty-one percent of youth were aware of SCDNR programs' "Hooked on Fishing," "Fishing Tackle Loaner Program," or "South Carolina Reel Kids."
- The top three factors rated as making SCDNR aquatic events or classes better were:
 - 1) if youth could be at the event or class with their friends (95%),
 - 2) if youth could win prizes at the event (93%) and
 - 3) if youth could enjoy nature and the outdoors while at the event (91%).

Gender

- A significantly greater proportion of male youth (14%) compared to female youth (6%) correctly identified the South Carolina Department of Natural Resources as the state agency responsible for managing and conserving fish and wildlife in South Carolina.
- Male youth were generally more supportive of activities that dealt with the physical act of catching fish. More male than female youth reported "catching a big fish," "catching a lot of fish," "keeping the fish they

caught" and "being able to eat the fish they caught" would make the class or event better.

- More female youth reported ethical/moral activities would have made the event or class better including, "learning how to fish safely such as how to cast properly and that hooks are sharp" and "learning how to safely handle and release a fish."

Grade

- Significantly more youth (17%) in grades 9-12 correctly identified the South Carolina Department of Natural Resources as the agency responsible for managing and conserving wildlife in South Carolina than any other grade cohort.
- Programs targeted toward the youngest anglers in grades 1-4 should be closely tied to the family whereas programs targeting higher grade-level youth in grades 9-12 should focus on including more socialization opportunities.
- Youth in grades 1-4 liked to keep the fish they caught more than any other grade cohort.
- Youth in grades 1-4 viewed receiving some token or certificate as a positive component to a fishing event or class.
- A significantly greater proportion of children in the lower grade levels, grades 1-8, indicated that learning how to identify fish and learning facts about fish would have made the event better.

- Middle grade-level youth appeared to have advanced in their participation in and thinking of fishing to areas of skill development.
- The combination of fishing and socializing is more important to higher grade-level youth.
- Older youth were much more concerned than lower grade-level youth with the act of fishing and of fishing in order to "relax and get away from it all while fishing."

Aquatic Information and Computers

Overall

- Nearly 80% of youth used the Internet.
- A minority of youth who used the Internet accessed the Internet to find information on aquatic animals (48%), aquatic habitats (33%) or information about fishing (18%).

Fishing and Aquatic Resource Information within Schools

Overall

- More youth had seen or heard information that helped them learn more about fishing or increased their interest in going fishing outside of school (45%) than in school (22%).
- Fifty-three percent of youth were in a school class, within the last twelve months, that did something to help them learn about the oceans and the animals and plants that live in the ocean. Forty-six percent of youth were in a school class, within the last twelve months, that did something to help

them learn about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live in South Carolina's aquatic habitats.

- A majority of youth reported they would like to learn even more in school about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live in South Carolina's aquatic habitats (80%) as well as learn more about fishing in school (68%).

Gender

- A significantly greater proportion of male youth (51% relative to 38% of females) indicated that they had heard information outside of school that helped them learn more about fishing and/or that increased their interest in going fishing.
- More male youth had seen or heard information in school about fish species, the act of fishing, and fishing skills than female youth in school.
- A significantly greater proportion of male youth (23% relative to 13% of females) indicated that they heard information in school through their teacher through informal stories etc.
- Female youth were more likely than male youth to have heard about fishing through formal classroom instruction.

Grade

- More youth in grades 5-8 than any other grade cohort reported having seen or heard information both inside (27%) and outside (51%) of school about fishing.

- Youth, 8th grade and under, with their strong ties with fishing and family, reported hearing information outside of school from their father.
- For youth in grades 5-8, simply seeing activities related to fishing and people fishing outside of school increased their interest levels in fishing.
- Specifically pertaining to information seen or heard in school about fishing, as age increased, classroom instruction and hearing information informally from a teacher were increasingly reported to increase interest in fishing.
- Regardless of grade cohort, learning about fish species in school increased interest in fishing.
- Generally, as grade level increased, youth reporting having learned about South Carolina's aquatic resources in a school class within the last year decreased.
- An overall majority of all grade cohorts wanted to learn more about both "rivers, ponds, lakes or streams and the animals and plants that live in South Carolina's aquatic habitats" and fishing.
- There was a steady decline in interest level in learning about fishing as grade increased.

Knowledge Levels of Aquatic Resources

- Virtually all youth knew what the word habitat meant.
- Over two-thirds of youth (67%) did not know what largemouth bass eat.
- The majority of youth (63%) did not know what river otters usually eat.
- A majority of youth (68%) knew the correct food of sharks.

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INTRODUCTION AND METHODOLOGY

The South Carolina Youth Aquatic Survey was conducted on behalf of the South Carolina Department of Natural Resources (SCDNR). The purpose of this study was to assess South Carolina youths' awareness of issues related to aquatic natural resources and recreational fishing. The goal of this study was to gather the data on South Carolina youth in order to assist the South Carolina Department of Natural Resources tailor its youth aquatic programs and services. South Carolina youths' attitudes toward, opinions on, knowledge of, and perceived priorities toward South Carolina aquatic resources and recreational fishing were gathered in this quantitative survey. This study examined fishing initiation, motivation, and fishing participation rates among South Carolina youth. Data were examined for all youth and for their gender and grade-level population subsets.

The survey questionnaire was developed cooperatively between the South Carolina Department of Natural Resources and Responsive Management (RM) and was administered by telephone to randomly selected South Carolina youth between the ages of 8 and 18. Telephones were the preferred medium to conduct this survey since nearly all potential respondents had access to a phone. The select-targeted telephone sample was obtained from Survey Sampling, Inc. in Fairfield, Connecticut and was designed to reach those households with youth. Prior to the telephone interviews, a letter was sent to each potential respondent's home on behalf of the South Carolina Department of Natural Resources to inform the youth and their family that a staff-member from Responsive Management would be calling them in the near future to ask them questions about natural resources and their outdoor activities. Parents were encouraged to stay on the phone with their youth during the course of the interview.

A central telephone-polling site at Responsive Management headquarters allowed for rigorous quality control over interviewers and over data collection in general. Facilities were staffed by professional interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources and outdoor recreation for state fish and wildlife agencies and natural resource organizations. In addition, interviewers possessed previous experience conducting surveys with youth and fishing participation. Interviewers were trained according to standards established by the Council of American Survey Research Organizations. The Survey Center Managers randomly monitored interviewers to evaluate each interviewer's performance.

Responsive Management Survey Center Managers conducted project briefings with each interviewer prior to his or her beginning work on this project. Interviewers were briefed and instructed on study goals and objectives, type of study, handling of survey questions, interview length, termination points, qualifiers for participation, reading of interviewer instructions, reading of survey, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. Professional Responsive Management staff edited each survey to check for clarity, understanding, completeness, and form.

Interviews were conducted Monday through Friday from 4:00 p.m. to 9:00 p.m. and on Saturday from 12:00 p.m. to 6:00 p.m. local time. A multiple callback design was used to maintain the representativeness of the sample, avoid bias toward people easy to reach by telephone, and provide an equal opportunity for all to participate. Subsequent calls were placed at different times of the day and on different days of the week. All telephone interviews were completed during April 2001.

The software used for data collection was Questionnaire Programming Language (QPL) version 4.1 (National Technical Information Services, 1999). QPL is a comprehensive system for computer-assisted telephone interviewing. The survey data was entered into the computer as the interviews were conducted, eliminating possible errors associated with manual data entry after the completion of the interviews.

Response Rates

In order to obtain the survey sample, a total of 3,816 phone numbers were attempted, resulting in: 894 call backs, no answers or busy signals of three or more times; 71 call backs, no answers or busy signals of less than three times; 98 no answers or busy signals of three or more times; 8 deaf or language barrier problems; 66 business/government; 148 refusals; 1,120 not eligible; 241 disconnected telephones; 26 terminated interviews; and 1,147 completed surveys. Thus, the response rate was 50.2%.

The response rate calculation above, however, is an underestimate. Individuals who were not contacted may or may not have had children between the ages of 8 and 18 and therefore may or may not have been eligible for the study. According to SSI (Survey Sampling Incorporated, Fairfield CT) the targeted telephone sample they provided had a 45-60 percent likelihood of having at least one child between the ages of 8 and 18 in the household. Using the mean of these two values (52.5%) and the values for telephone numbers that resulted in requests for a call back, or resulted in a no answer or busy signal [three or more times (894), or less than three times (71)] results in a response rate of 1147/678 (instead of 1147/1136) yielding a rate of 59.1%.

Throughout this report, findings are reported at a 95% confidence interval. For the entire sample of South Carolina youth, the sampling error is at most plus or minus 2.89%. This means that if the survey were administered 100 times to different samples that were selected in the same

fashion, 95 of the 100 surveys' findings would fall within plus or minus 2.89% of each other. Sampling error was calculated using the formula described below, a sample size of 1147 and a population size of 601,268. The population size is for all residents of South Carolina 18 years of age or younger (the same age criterion used for the current study). Population data was gathered from the United States Census Website (<http://factfinder.census.gov/>).

The term "estimated" is used to indicate that projections are based on a sample. The actual value of each variable studied is likely to be the value indicated. The actual value will fall within the confidence intervals indicated 95 times out of 100. Due to rounding, percentages depicted in graphs and tables may vary slightly ($\leq 0.5\%$) from actual data and therefore may not total exactly 100%.

Weighting

Data was weighted by age to match the naturally occurring age distribution of youth in the population in South Carolina. The data used was from the 1999 United States Census estimates and are listed below:

$$B = \sqrt{\frac{\frac{N_p(.25)}{N_s} - .25}{N_p - 1}} \quad (1.96)$$

Where: B = maximum sampling error (as decimal)
 N_p = population size (e.g. total pop. of state)
 N_s = sample size

Derived from formula, p. 206 in Dillman, D. A. 2000. Mail and Internet Surveys. John Wiley & Sons, NY.

Note: This is a simplified version of the formula that calculates the maximum sampling error using a 50:50 split (the most conservative calculation since a 50:50 split would give maximum variation).

Age-Based Weighting Adjustments Using Data From The 1999 Census Estimates						
Age	Population	Proportion (Population/Total Population)	Expected Number (Proportion x 1147)	Actual Number	Weighting Factor	Adjusted Number (Actual x Weight)
8	53798	0.0895	102.63	85.00	1.21	102.63
9	57733	0.0960	110.13	89.00	1.24	110.13
10	55907	0.0930	106.65	110.00	0.97	106.65
11	53471	0.0889	102.00	118.00	0.86	102.00
12	52480	0.0873	100.11	140.00	0.72	100.11
13	52899	0.0880	100.91	139.00	0.73	100.91
14	53008	0.0882	101.12	113.00	0.89	101.12
15	52281	0.0870	99.73	123.00	0.81	99.73
16	54005	0.0898	103.02	105.00	0.98	103.02
17	58431	0.0972	111.47	73.00	1.53	111.47
18	57255	0.0952	109.22	52.00	2.10	109.22
Total	601268	1.00	1147.00	1147.00	1.00	1147.00

* Three 7-year-olds, and two 6-year-olds were combined with and adjusted as 8-year-olds

RESULTS

Fishing Participation

Overall

- **A projected 548,847 of the 601,268 youth (91%) between the ages of 8 and 18 in South Carolina have been fishing at least one time in their lives.**
- **A projected 370,615 of the 601,268 youth (62%) between the ages of 8 and 18 in South Carolina had fished during the last twelve months.**
- **Fifty-five percent of all youth in South Carolina fished in freshwater.**
- **Twenty percent of all youth in South Carolina fished in saltwater.**
- **The most common reason youth go fishing is to “have fun.”**
- **Youth who had fished within the last twelve months, fished an average of 13 days per year.**
- **Fifty-three percent of youth would go fishing more often if they could.**
- **The most common reason reported for not fishing more often was “not enough time” (38%).**

Enjoyment of fishing and participation in fishing among South Carolina youth was nearly universal. Ninety-one percent of youth in South Carolina have gone fishing at least once in their lives. Ninety-three percent of youth in South Carolina said they liked to fish either “a little” (46%) or “a lot” (47%).

It was speculated in “Youth and Fishing in South Carolina,” a focus group report and literature review, (Responsive Management 1999) that 75% to 80% of youth in South Carolina would have fished at least once in their lives. Through our quantitative study, we can now say that the percentage of youth in South Carolina who participated in fishing is even higher (91%).

Conversely, this means that less than ten percent of South Carolina youth have not been introduced to the sport of fishing. The current research finds a projected 548,847 of the 601,268 youth (91%) between the ages of 8 and 18 in South Carolina have been fishing at least one time in their lives.

Therefore, as suggested in the focus group report, the promotion of fishing among youth should be focused on retention rather than initiation. Angler education and promotion programs for youth should focus on those anglers who already fish.

Nearly two-thirds (62%), of South Carolina youth had fished within the past twelve months. For the state of South Carolina, a projected 370,615 of the 601,268 youth (62%) between the ages of 8 and 18 in South Carolina have fished during the last twelve months. Overall, 55% of all South Carolina youth had gone freshwater fishing while 20% of all South Carolina youth had gone saltwater fishing.

Those youth who reported having fished during the last twelve months were asked, “When was the last time you went fishing? Did you go this spring, this past winter, last fall, last summer or last spring?” The largest percentage of those who had fished in the last twelve months had fished as recently as “this spring” (41%), followed by 28% who had fished “last summer.”

Youth, who had fished within the last twelve months, fished an average of 13 days per year and wished they fished more often. Fifty-three percent of all youth, regardless of whether they had fished within the last twelve months, would go fishing more often if they could. Thirty-three percent of youth would not change how much they fished, reporting they would go about the same amount of days that they currently fish. Five percent of youth would go fishing less if they could.

Youth go fishing for a variety of reasons with no single reason being reported by a majority of youth. The most popular response to why youth go fishing was “to have fun” reported by 45% of youth. The next most popular response, given by 15% of youth, was “to catch fish” followed by “to be with family” (10%). Numerous other reasons for fishing were reported by less than ten percent of the youth population.

In an open-ended multiple response question, youth gave a variety of reasons for why they did not go fishing more often. The most common reason reported for not fishing more often, reported by 38% of youth, was “not enough time.” When asked specifically what caused respondents to not have enough time, “school” was the only reason given by a majority of youth (69%). Other sports or hobbies were restrictions on youth’s time for 33%, work obligations restricted 19%, and family obligations restricted 9% of youth’s time. Twenty-three additional reasons were reported for why youth did not fish more often, however, all of these reasons were reported by less than ten percent of the youth population.

Gender

- **Significantly more male youth (94%) than female youth (88%) in South Carolina had gone fishing in their life.**
- **Significantly more male (73%) than female (60%) youth, who had fished in their life, had fished within the past 12 months.**
- **Regardless of gender, most youth who fished in the last twelve months, fished in freshwater (91% of males and 88% of females).**
- **The majority of male youth (55%) liked fishing “a lot,” whereas the majority of female youth (54%) liked fishing “a little.”**
- **More male youth (46%) had fished the most recently – reporting having fished “this spring” than female youth (34%).**

- **Male youth spent considerably more days (17) fishing than female youth (8).**
- **Large percentages of both male youth (57%) and female youth (47%) anglers wished they could fish more often.**
- **The most popular reason youth go fishing, regardless of gender, was “to have fun,” reported by 45% of *both* male and female youth anglers.**
- **The most common reason reported for both male (41%) and female (35%) youth for not fishing more often was “not enough time.”**
- **When asked specifically what caused respondents to not have enough time, “school” was the only reason given by a majority of male (65%) and female (74%) youth.**

As was found in the “Youth and Fishing in South Carolina” report as well as other studies (Duda et al, 1998), there exists a disparity in fishing participation between male and female youth anglers. Significantly [$\chi^2(2, n=1147) = 11.58, p < 0.01$] more male youth (94%) than female youth (88%) in South Carolina had gone fishing in their life. Females typically fished less often as children, likely predisposing them to not continuing to participate in fishing later in life. Yet, large majorities of both male and female youth have gone fishing in their life.

Most all fishing done by youth, regardless of gender, is in freshwater. Ninety-one percent of male youth and 88% of female youth, who had fished in the last twelve months, fished in freshwater. Thirty-four percent of male youth and 29% of female youth, who had fished in the last twelve months, fished in saltwater.

There was *not* a significant difference [$\chi^2(4, n=705)=3.41, p=. 49$], among those male and female youth who had fished in the last twelve months, in the number of male (91%) and female (88%) freshwater youth anglers. There was *not* a significant [$\chi^2(2, n=706) = 2.01, p=0.37$] difference in the number of male (34%) and female (29%) youth saltwater anglers who had

fished in the last twelve months. There was also *not* a significant [$\chi^2(6, n=694) = 5.74, p = 0.45$] difference, among those male and female youth who had fished in the last twelve months, between the number of male and female youth anglers who fished mostly in freshwater, saltwater, or both.

Male youth liked fishing significantly [$\chi^2(6, n=1047) = 39.96, p < .001$] more than female youth. The majority of male youth (55%) liked fishing “a lot,” whereas the majority of female youth (54%) liked fishing “a little.”

Significantly [$\chi^2(4, n=1046) = .001, p < 0.001$] more male (73%) than female (60%) youth who had fished in their life had fished within the past 12 months. Conversely, over a third (39%) of female youth who had fished in their life had not fished in the past twelve months whereas a quarter (25%) of male youth who had fished in their life had not fished in the past twelve months.

Not only had more male youth fished within the past twelve months, but more male youth had fished most recently – reporting having fished “this spring.” When youth were asked, “When was the last time you went fishing? Did you go this spring, this past winter, last fall, last summer or last spring?” The largest percentage of male youth (46%) reported having last fished “this spring” compared to 34% of female youth who reported having last fished “this spring.” The largest percentage of female youth (36%) reported having fished “last summer” compared to 23% of male youth who reported having last fished “last summer.” The fact that male youth had fished more recently than female youth within the last year is another indicator that male youth are more active anglers.

More male youth had fished within the last twelve months, fished the most recently, and fished more days than female youth. Male youth spent considerably more days fishing than

female youth. On average, male youth anglers spent 17 days per year fishing compared to 8 days per year for female youth anglers. This represents a significant [$t(899) = 4.55, p < .001$] difference in the number of days per year that male youth ($n = 516, M = 16.56, SD = 32.10$) and female youth ($n = 385, M = 7.60, SD = 24.92$) fished.

Large percentages of both male youth (57%) and female youth (47%) anglers wished they could fish more often. There was a significant difference between male and female youth [$\chi^2(8, n = 996) = 27.39, p < .001$] with a greater proportion of male (57%) than female youth (47%) who wished they fished more often. A third (33%) of both male and female youth anglers would not change how much they go fishing, reporting they would go about the same amount of days that they currently fish. More female than male youth indicated they wished they fished less (6% relative to 3% of males) or they were not at all interested in fishing (13% females relative to 6% males).

Male and female youth fished to have fun. The most popular reason youth go fishing regardless of gender was “to have fun,” reported by 45% of *both* male and female youth anglers. However, this finding should be viewed cautiously. “To have fun” can have very different connotations for males and females. Other responses given by male and female youth anglers, though reported by fewer respondents, may shed a better light on the motivations of both male and female youth anglers. There was a significantly [$\chi^2(22, n = 997) = 54.08, p < .001$] different distribution of reasons why male and female youth chose to go fishing. For male youth, fishing “to catch fish” (19% males relative to 11% females) and “to relax” (8% relative to 4% for females) are more important reasons to go fishing than for female youth. For female youth anglers “to be with family” is a more important reason to fish than it is for male youth anglers (15% females relative to 6% males). However, SCDNR fisheries staff should keep in mind,

despite, the small obvious differences between male and female youth in the patterns just explained, there remains an identical desire (45%) among male and female youth to fish “to have fun.” Fishing programs, events or classes should focus on having fun over other skill-based, educational, or competitive goals.

In an open-ended multiple response question, both male and female youth gave a variety of reasons for why they do not go fishing more often. The most common reason reported for both male and female youth for not fishing more often was “not enough time” reported by 41% of male youth and 35% of female youth.

When asked specifically what caused respondents to not have enough time, “school” was the only reason given by a majority of male (65%) and female (74%) youth. “School” as a restriction on the *time* youth had to fish neared a significant difference [$\chi^2(2, n=380) = 5.10, p = .08$] between male and female youth, with more female youth (74%) than male youth (65%) reporting “school” as a restriction on the *time* they had to fish. Following “school,” other restrictions on youth’s *time*, though reported by much lower percentages, were “other sports or hobbies” (29% of male youth and 39% of female youth) and “work obligations” (22% of male youth and 16% of female youth). “Other sports or hobbies” had a significantly [$\chi^2(2, n=379) = 6.69, p < .05$] greater proportion of female youth (39% relative 29% of males) who indicated that other sports/hobbies prevented them from fishing more often.

Twenty-five additional reasons were reported by male and female youth for why they did not fish more often; however, all additional twenty-five reasons were reported by ten percent or less of respondents. Reasons that differed significantly between males and females will be discussed below though it should be noted that each of these categories had low n-values. Male and female youth anglers differed significantly [$\chi^2(2, n=997) = 8.81, p < .05$] with a greater

proportion of female youth (10% relative to 5% males) indicating they did not fish more because they were not interested. A significantly [$\chi^2(2, n=997) = 9.61, p < .01$] greater proportion of male youth (5% relative to 3% females) did not fish more often due to lack of transportation.

Grade

- **Most South Carolina youth are introduced to fishing at a young age and those who remain within the sport of fishing become active anglers by grades 9-12.**
- **Eighty-five percent of youth have fished by the fourth grade.**
- **Among youth who had fished in the last twelve months, more youth in the lower grades (72% for grades 1-4; 69% for grades 5-8; and 64% for grades 9-12) reported having fished in the last twelve months.**
- **Anglers in grades 1-4 fished an average of 8 days per year; anglers in grades 5-8 fished an average of 12 days per year and, anglers in grades 9-12 fished an average of 15 days per year.**
- **Youth in grades 1-4 were the most enthusiastic about fishing with 55% reporting liking fishing "a lot," compared to 48% in grades 5-8 and 41% in grades 9-12 who liked fishing "a lot." Youth in the higher grade levels were significantly more reserved in their ratings of liking fishing.**
- **A greater proportion of youth in grades 1-4 (23% relative to 16% in grades 5-8 and 10% in grades 9-12) indicated they fished "to catch fish." As age increased, "to catch fish" became an ever increasingly unimportant reason for fishing.**
- **In general, those reasons to fish that had a more naturalistic connotation of "being close to nature" and "to relax" were especially important to higher grade-level youth.**

Most South Carolina youth are introduced to fishing at a young age and those who remain within the sport of fishing become active anglers by grades 9-12. Eighty-five percent of youth had fished by the fourth grade with upwards of 94% of youth in grades 9-12 having fished at least once in their life.

Regardless of grade cohort, most youth in South Carolina, who had fished in the last twelve months, were freshwater anglers. There was a nearly significant, grade-based difference [$\chi^2(4, n=698) = 9.34, p = .053$] in freshwater participation among youth who had fished in the last twelve months (90% in grades 1-4; 91% in grades 5-8; and 89% in grades 9-12). Freshwater fishing among grade cohorts, who had fished in the last twelve months, showed a marginally higher proportion of youth in grades 5-8 participating in freshwater.

There was a significant [$\chi^2(2, n=697) = 6.36, p < .05$] difference between grade cohorts, who had fished in the last twelve months, among saltwater anglers with a greater proportion of youth in the higher grades participating in saltwater fishing (38% for grades 9-12; 29% for grades 5-8; and 28% for grades 1-4).

There was *not* a significant [$\chi^2(6, n=685) = 6.67, p = 0.35$] difference among grade cohorts, who had fished in the last twelve months, in the predominant type of fishing participated in, either freshwater, saltwater, or both.

Large majorities, all over ninety percent, of all grade cohorts liked fishing either “a little” or “a lot.” More youth in grades 1-4 liked fishing “a lot” (55%), compared to 48% in grades 5-8 and 41% in grades 9-12. Youth in the higher grade levels were significantly [$\chi^2(6, n=1029) = 18.89, p < 0.01$] more reserved in their ratings of liking fishing. Youth in grades 1-4 had the highest ranking of liking fishing “a lot” (55% for grades 1-4; 48% for grades 5-8; and 41% for grades 9-12); conversely, youth in grades 1-4 also had the lowest ranking of liking fishing only

“a little.” As grade level increased liking fishing only “a little” increased from a low of 41% for grades 1-4, to 45% for grades 5-8, and finally 50% for grades 9-12.

The older the grade cohort level, the fewer youth who had fished in the last twelve months though over two-thirds or more of all grade cohorts had fished within the last twelve months. Significantly [$\chi^2(4, n=1030) = 26.10, p < 0.001$] more youth in the lower grades (72% for grades 1-4; 69% for grades 5-8; and 64% for grades 9-12) reported having fished in the last twelve months.

Despite, fewer youth (64%) in grades 9-12 having fished in the last twelve months, more youth (48%) in grades 9-12 had fished the most recently – “this spring” – than any other grade cohort. When youth were asked, “When was the last time you went fishing? Did you go this spring, this past winter, last fall, last summer or last spring?” the most common response regardless of grade cohort was “this spring” (48% in grades 9-12, 40% in grades 5-8, and 32% in grades 1-4). The second most common response for all grade cohorts was “last summer” (31% of grade 1-4, 29% of grade 5-8, and 25% of grade 9-12).

As grade increased, the number of days fished per year also increased. Anglers in grades 1-4 fished an average of 8 days per year; anglers in grades 5-8 fished an average of 12 days per year and as previously reported, anglers in grades 9-12 fished an average of 15 days per year. There was an overall significant [$F(2, 885) = 3.63, p < 0.05$] difference in the number of days per year youth fished dependent upon their grade level. [Those in grades 1-4 ($n=187, \underline{M}=8.27, \underline{SD}=19.60$), those in grades 5-8 ($n=318, \underline{M}=12.28, \underline{SD}=26.16$), and those in grades 9-12 ($n=384, \underline{M}=15.34, \underline{SD}=35.77$).]

Despite the fact that fewer youth in grades 9-12 had fished in the last twelve months, youth in grades 9-12 fished the most recently – “this spring” – and fished above the average

number of days (15) per year. The activity of youth anglers in grades 9-12 may be indicative of the fact that those youth in grades 9-12 who fished, though numerically less than other grade cohorts, are more active in the sport.

As grade level increased the desire to want to fish more decreased. However strong majorities in all grade cohort levels wanted to fish more or about the same; small percentages wanted to fish less. There was a significant [$\chi^2(8, n=984) = 37.45, p < .001$] decline in the desire to fish as grade level increased. Sixty-one percent of youth in grades 1-4 wanted to fish more, 53% of youth in grades 5-8 and 48% of youth in grades 9-12 wanted to fish more than they already did. Just over a third (36%) of youth in grades 5-8 and grades 9-12 reported they were satisfied with the amount of fishing they participated in, responding they would not change how much they currently go fishing. A quarter (25%) of youth in grades 1-4 did not want to change how much they currently fish.

As grade level increased, those youth not interested in fishing increased (6% in grades 1-4, 6% in grades 5-8, and 13% in grades 9-12). The decrease in fishing motivation and interest in fishing as grade cohort increased reflects the dropout of youth from fishing as age increases.

No single reason for going fishing was reported by a majority of any grade cohort. A general summation of the top three reasons given for fishing was: to have fun, to fish, and to be with family. "To have fun," was the most popular motivation for why youth go fishing for all grade cohort levels, reported by 48% of grades 1-4, and grade 5-8, and 40% of grades 9-12. Tellingly, relative to the literature on attrition, the percentages of youth indicating they fished "to have fun" dropped precipitously in the highest grade levels (40% relative to 48% from both grades 1-4 and grades 5-8). Studies on attrition in sports show that around age eleven, youth begin to explore other sports and tend to drop out of sports previously participated in prior to age

eleven (Sapp & Haubenstricker, 1978). Dropout rates in fishing participation may be a result of youth exploring new and different sports or may be a result that youth begin to find fishing less fun.

However, as stated earlier, this finding concerning going fishing “to have fun” should be viewed cautiously. “To have fun” can have very different connotations for youth at different grade levels. What a second grader defines as “fun” is bound to be different from what a high school sophomore defines as “fun.” Other responses given by grade cohorts, though reported by fewer respondents, may shed a better light on the motivations of youth at different grade levels. The following findings represent statistical differences among grade cohorts though it should be noted that they have low n-values and low percentages reporting each. SCDNR fisheries staff should not lose sight of the fact that “to have fun” remains the overriding reason youth of all grade cohorts go fishing.

There was a significant [$\chi^2(22, n=986) = 101.42, p < .001$] difference in the distribution of reasons youth in the three grade cohorts selected for going fishing. A greater proportion of youth in grades 1-4 (23% relative to 16% in grades 5-8 and 10% in grades 9-12) indicated they fished “to catch fish.” As noted in the report “Youth and Fishing in South Carolina,” elementary school children are very egocentric in their perception of the outdoors. They relate to the world in very concrete ways. They desire hands-on learning. The desire of youth in grades 1-4 “to catch fish” reflects both their desire for hands-on learning, seeing the world in very concrete ways, and their egocentric view of nature. Allowing young youth to keep the fish they catch may be an effective way of increasing their enjoyment of fishing.

As age increases, “to catch fish” becomes an ever increasingly *unimportant* reason for fishing. Compared to the 23% of respondents in grades 1-4 who reported “to catch fish” as an

important reason, 16% of grades 5-8 and 10% of grades 9-12 said “to catch fish” was an important reason to fish. Interestingly, there was virtually no difference among the different grade cohorts in the selection of catching big fish (0%, 1%, and 8% for grades 1-4, grades 5-8, and grades 9-12, respectively). This had been a finding in previous research conducted by Responsive Management (2001).

In general, those reasons to fish that had a more naturalistic connotation of “being close to nature” and “to relax” were especially important to higher grade-level youth. As grade level increased, these naturalistic reasons became more important. The proportion of youth who fished to relax increased as grade level increased (1% in grades 1-4, 4% in grades 5-8, and 12% in grades 9-12). This finding was also supported by the fact that those in the higher age levels were more likely to report that, if a fishing class or event were relaxing, it would make the event better. Ninety-three percent of respondents in grades 9-12, 85% of respondents in grades 5-8 and 67% of respondents in grades 1-4 reported relaxing as a positive component to a fishing event or class.

Reasons for fishing that were tied to social connotations such as “to be with friends” became more important as grade level increased. A greater proportion of youth in grades 9-12 (6% relative to 2% for grades 5-8 and 1% for grades 1-4) indicated they fished to be with friends.

In an open-ended multiple response question, youth of all grade cohorts gave a variety of reasons for why they did not go fishing more often. The most popular reason reported by all grade cohort levels was “not enough time” reported by 41% of grades 9-12, 39% of grades 5-8 and 34% of grades 1-4. Specifically, youth are restricted in their fishing by school, other sports/hobbies, and work.

When asked specifically what caused respondents to not have enough *time*, “school” was the only reason given by a majority of youth. Significantly [$\chi^2(2, n=380) = 9.45, p < .01$] greater proportions of youth in the higher grades indicated that school was a specific reason for not having enough *time* to go fishing with 57% of those in grades 1-4, 69% of those in grades 5-8 and 75% of those in grades 9-12 making this selection. Youth in grades 9-12 (30%) had a significantly [$\chi^2(2, n=379) = 23.57, p < .001$] greater proportion of responses that work was one of the specific reasons they did not have enough time to fish.

Other sports or hobbies were restrictions on youth’s *time* especially for the 5-8 grade cohort (42%) compared to 29% of grades 1-4 and 28% of grades 9-12. There was a significantly [$\chi^2(2, n=379) = 7.87, p < .05$] greater proportion of youth in grades 5-8 who indicated that other sports/hobbies were specific reasons preventing them from fishing more. This reflects youth attrition in sport concomitant with the exploration of new sport activities during the middle school years (Sapp & Haubenstricker, 1978). Children, with age, may begin reducing their wide variety of activities as they decide which activities are most congruent with their needs or interests. Youth who stay in fishing may have fewer distractions because they have become more “decided” about their sport.

Other restrictions which had significant differences between grade cohorts, however due to low n-values may lack clinical significance, were that as age increases fishing becomes increasingly more boring and youth in grades 1-4 were restricted by boat problems and weather problems. As grade level increased, fishing was reported as boring more often. A significantly [$\chi^2(2, n=986) = 12.35, p < 0.01$] greater proportion of youth in the upper grade cohorts indicated fishing was boring (7% relative to 4% for grades 5-8 and 1% for grades 1-4).

There was a significantly [$\chi^2(2, n=986) = 7.70, p < .05$] greater proportion of youth in grades 1-4 (3% relative to 1% in grades 5-8 and grades 9-12) who indicated that boat problems were the reason they did not fish more often. This group also indicated that they did not like the weather [$\chi^2(2, n=986) = 14.64, p < .001$] (3% relative to 0% and 1% for grades 5-8 and grades 9-12 respectively).

Fishing Initiation

Overall

- **Youth fishing occurs almost entirely in the familial context.**
- **A father or male family member initiates almost all youth into fishing.**
- **Over two-thirds (67%) of youth were first taught to fish by their father.**
- **Most youth usually fished with their father (63%), and most youth preferred to fish with their father (51%).**

Supported by focus group findings, youth fishing occurs almost entirely in the familial context and initiation occurs almost universally through a male family member. Angler education programs that focus on initiation are merely replicating the type of initiation process that occurs naturally in the family setting. Programs that seek to augment initiation, particularly with young girls, should aim at complementing these natural processes by targeting fathers. Fathers are the most frequent, and most highly desired, points of contact for fishing experiences with all members of a family. Appeals to fathers should aim at including wives and daughters in the sport.

Twenty-seven percent of youth lived in a family in which both the mother and father fished. A majority of youth (59%) however, lived in a family in which only the father fished. Only two percent of youth lived in a family in which only the mother fished.

Seventy-seven percent of fathers fished and of those fathers who fished, 50% fished in a household in which the mother did not fish. Thirty-five percent of fathers who fished, fish “a lot;” 47% of fathers reportedly fished “a little.”

Though youth nearly always experienced fishing with male counterparts, this does not indicate that women are not fishing. It is a fact that fewer women fish, and that females fish less than males, however, women can and do play a vital role in the sport of fishing. Twenty-nine percent of mothers are reported by youth to fish. Most mothers were reported by youth to fish “a little” (50%) and 14% of youth reported their mother fished “a lot.” Among the 29% of mothers who reportedly fished, only 2% of mothers who fished belong to a household in which the father did not fish as well. This indicates that nearly all mothers who fished join in the sport with their husband. Males both dominate the sport of fishing as well as serve as a vehicle to encourage women family members to fish.

Fishing initiation for youth is a male dominated activity. A father or male family member initiates almost all youth into fishing. Most youth usually fished with their father, and most youth preferred to fish with their father.

Over two-thirds (67%) of youth were first taught to fish by their father. Significantly fewer youth (13%) reported being first taught to fish by their grandfather as the second most common fishing instructor.

Fishing with a father was by far the most common fishing companion for most youth. Nearly two-thirds of youth (63%) usually fished with their father and 51% of youth most liked to fish with their father. After the 63% of youth who reported usually fishing with their father the next common response was friends the same age with 15% followed by a mother or brother each with 10%.

Fishing with a father was also the most preferred fishing companion for youth. Fifty-one percent of youth most liked to go fishing with their father, followed by 20% of youth who most liked to fish with friends and 10% of youth who most liked to fish with grandparent(s).

Despite the fact that 29% of mothers fished, few women actually initiated their children into the sport of fishing. Fishing initiation that occurred with a female family member was very low. Four percent of youth reported their mothers first taught them to fish, a grandmother initiated 2% of youth and 1% of youth were initiated by an aunt. Only 10% of youth usually went fishing with their mother, and only 9% of youth most liked to fish with their mother.

Friends of youth also played an important role in fishing participation. Twenty percent of youth most liked to fish with friends, and 15% of youth usually went fishing with friends the same age as themselves. Many youth enjoyed fishing with other youth, had friends who fished and thought fishing was “cool,” though generally excitement and enthusiasm for fishing in relation to friends was tempered. For example, though 84% of youth reported that their friends fished, only 29% of youth reported “a lot” of their friends fished. In addition, even though only a small minority (14%) of youth reported that children their age generally viewed fishing as “not cool at all,” only 21% viewed fishing to be a “very cool” activity. The majority (61%) of youth viewed fishing as “a little cool.”

Gender

- **Regardless of gender, most youth were first taught to fish by their father. (69% of males and 64% of females).**
- **Most youth regardless of gender, reported overwhelmingly that they usually fished with their father (64% of females and 62% of males).**
- **After father, the second most common fishing companion for male youth (19%) was friends the same age.**

- **After father, the second most common fishing companion for female youth (14%) was their mother.**
- **When asked to consider who respondents would most like to go fishing with, half of both male (52%) and female youth (51%) reported they most preferred to go fishing with their father.**
- **It appears that though male and female youth liked fishing with friends, had friends who fished and reported youth their age thought of fishing as "cool," that male youth had slightly stronger opinions, knew more friends who fished and thought of fishing more highly than female youth.**

There was *not* a significantly [$\chi^2(8, \underline{n}=997) = 143.49, p = .10$] different proportion of male to female youth who indicated that one, both, or neither parents fished. Fifty-four percent of male youth and 45% of female youth reported that just their father fished. Very few youth reported that just their mother fished (2% of males and 3% of females). Twenty-five percent of male youth and 30% of female youth reported both parents fished.

There was *not* a significant [$\chi^2(6, \underline{n}=773) = 4.60, p = .60$] gender-based difference in the proportions of male to female youth with response to the question about how much their father fished. Of those youth who reported their father fished, slightly more male youth (50%), compared to 43% of female youth, indicated their father fished "a little," and slightly more female youth (38%) compared to 32% of male youth indicated their father fished "a lot." Equal percentages (18%) of male and female youth reported their father did "not fish much at all."

There was *not* a significant [$\chi^2(6, \underline{n}=291) = 3.60, p = .73$] gender-based difference in the proportions of male and female youth regarding how much their mother fished. Of those youth who reported their mother fished, slightly more male youth (52%) compared to 47% of female

youth indicated their mother fished “a little,” and slightly more female youth (17%) compared to 11% of male youth indicated their mother fished “a lot.” Over a third of both male (36%) and female (34%) youth reported their mother did not fish much at all.

Regardless of gender, most youth were first taught to fish by their father. Over two-thirds of youth were first taught to fish by their father, 69% of male youth, and 64% of female youth. Slightly more male youth (14%) were first taught to fish by their grandfather than female youth (11%).

Though few youth reported being first taught to fish by a female fishing companion, when youth did report being taught to fish by a female fishing companion, more female youth than male youth were taught by a female fishing companion. Five percent of female youth compared to 3% of male youth were first taught to fish by their mother. Three percent of female youth compared to 1% of male youth were first taught to fish by a grandmother.

Most youth regardless of gender reported overwhelmingly that they usually fished with their father. Slightly more female youth (64%) than male youth (62%) usually fished with their father. Interestingly, though more male (69%) than female youth (64%) reported being first taught to fish by their father, more female than male youth reported usually fishing with their father. The exact same percentage of female youth (64%) who reported having been first taught to fish by their father, reported they usually fished with their father.

Male youth tended to fish with a broader range of companions than female youth, which may reflect the fact that fewer male youth usually fished with their father, whereas female youth generally fished with more selective fishing companions, their father being one of them, as well as the fact that males fished more days per year and thus had more opportunities to fish with different people.

After father, the second most common fishing companion for male youth (19%) was friends the same age. A significantly $[\chi^2(2, n=1047) = 18.84, p < .001]$ greater proportion of male youth (19% relative to 9% females) indicated they fished with friends the same age. This finding is also supported by the fact that more male (2%) than female youth (1%) reported being first taught to fish by a friend the same age. A significantly $[\chi^2(2, n=1047) = 7.74, p < .05]$ greater proportion of female youth (3% relative to 0% for males) indicated they fished with younger friends than male youth.

After father, the second most common fishing companion for female youth (14%) was their mother. A significantly $[\chi^2(2, n=1047) = 10.22, p < .01]$ greater proportion of female youth (14% relative to 8% of males) than male youth usually fished with their mother. In all but one case in which a female fishing companion was reported as the usual fishing partner, more female youth than male youth reported female fishing companions. The only female fishing companion reported equally by male and female youth was “aunt.” Mothers, sisters, and grandmothers were all reported to be usual fishing companions by more female than male youth. Four percent of female youth compared to 2% of male youth usually fished with a sister. Three percent of female youth compared to 2% of male youth usually fished with a grandmother.

When asked to consider who respondents would most like to go fishing with, half of both male (52%) and female youth (51%) reported they most preferred to go fishing with their father. The second most popular fishing companion youth preferred to go fishing with, regardless of gender, was friends, with 22% of male youth and 18% of female youth reporting. Male youth also preferred to fish with grandparents and aunts/uncles (both with 8%). Female youth also preferred to fish with their mother (12%) and grandparents (11%).

As with initiation and fishing companions there was a significant difference between male and female youth in whom they would rather fish with. When choosing fishing companions, females consistently chose other female fishing companions more often than males. There was a significant [$\chi^2(2, n=1147) = 13.76, p < .001$] gender-based difference in the proportions of male (6%) to female youth (12%) who indicated that they would rather fish with their mother. There was a significant [$\chi^2(2, n=147) = 8.84, p < .05$] gender-based difference in the proportions of male (1%) to female youth (4%) who indicated that they would rather fish with their sister.

Having an instructor who is of the same sex may positively effect being taught to fish. Modeling theory (Bandura, 1986; Gould & Weiss, 1981 McCullagh, 1987) has found that children learn the most material from skilled instructors who are similar to the participants in age, race, gender, and other demographic factors. Some research would tend to indicate that even instructors that are less skilled peers, are still superior models to highly skilled non-peer instructors. The act of being taught to fish involves close interaction between teacher and student and may be a topic more sensitive to instructor-based gender differences. Fishing may be similar to weight-lifting or golf, both sports with an initially low female presence. The growth of females involved in both sports is likely due to efforts to make females feel more comfortable in a male-dominated sport where they have had little exposure.

Young girls must explicitly be included in any successful youth angling participation programs. To bolster overall participation and include an underrepresented group, female youth need to be introduced to the sport sooner and, when possible, through a female role model. As reported in Brustad (1993), Weitzer (1989) found in a study of fourth graders that females had a

stronger mastery goal orientation when there existed more maternal involvement. In many cases, females learn better in the presence of other females, especially in the presence of their mothers.

The information that female youth may be more likely to be successfully initiated into the sport of fishing through female role models, that some female youth usually fished with female companions, and that some female youth preferred to fish with their mother or sisters is especially important when targeting the female angling market. The role of mothers who fish is especially important and could be a source of fishing promotion of older women anglers, themselves. If mothers were encouraged to fish more often, knowing that many young girls preferred to fish with their mothers, older adult women anglers might not only fish more often, but they might provide young female anglers with a female role model.

In any situations where females can also be used to model fishing skills, learning for many young girls will be more effective. Those females within the sport of fishing can be powerful role models for future generations in the sport.

Caution, however, should be taken when emphasizing the role of women in promoting fishing to young girls. Due to the low numbers of females in the sport, fathers seem the most logical starting point to increase the number of girls and women exposed to the sport. The male dominance in the sport of fishing, especially the important role of fathers in fishing coupled with the facts that 64% of females are initiated into fishing by their father, 64% of females usually fished with their father and 51% of females preferred to fish with their father leads, convincingly, to the idea that fathers should be encouraged to take their daughters and wives fishing as well.

Friends also played a key role in fishing for both male and female youth. Both male (22%) and female youth (18%) reported they preferred to fish with friends as the second most

popular companion after their father. As previously noted, male youth were more likely to fish with friends. A significant [$\chi^2(6, n=1147) = 83.48, p < .001$] difference also existed in the proportions of male to female youth in their assessment of how many of their friends fished.

More male youth reported having friends who fished and having more friends who fished than female youth. Thirty-nine percent of male youth reported they had “a lot” of friends who fished. In contrast, 17% of female youth had “a lot” of friends who fished. Female youth were also more likely to indicate that they had only “a few” friends who fished (62% relative to 49% for males) or that “none of their friends” fished (16% relative to 9% for males).

Both male and female youth reported that children their age think fishing is “cool.” Eighty-three percent of male youth and 79% of female youth reported fishing as either “very” or a “little cool.” Even though there was little difference in male and female youth who thought fishing was “cool,” more male youth reported fishing to be “very cool.” There was also a greater proportion of female youth (64% relative to males, 58%) who indicated that youth their age thought that fishing was only a “little cool.” It appears that although male and female youth liked fishing with friends, had friends who fished and reported youth their age thought of fishing as “cool,” that male youth had slightly stronger opinions, knew more friends who fished and thought of fishing more highly than female youth. There was a significantly [$\chi^2(6, n=1147) = 18.39, p < .01$] greater proportion of male youth (25% relative to females, 15%) who indicated that youth their age thought fishing was “very cool.”

Grade

- **The top three fishing companions who taught youth how to fish were the same regardless of grade cohort: a father, grandfather, and an uncle.**
- **The majority of youth, regardless of grade cohort, usually fished with their father.**

- **Lower grade-level youth usually fished with immediate family, but as youth grew older their desire to fish with friends, either older or of the same age, became more apparent.**
- **Lower grade-level children usually fished with and preferred to fish with family.**
- **As youth grew older, those who reported fishing with their father, grandfather, and/or mother decreased, and those who fished with friends increased.**
- **Youth in grades 9-12 usually fished with friends more than any other grade cohort and preferred to fish with friends more than any other grade cohort.**
- **Fishing is viewed as being "cool" most strongly by youth in grades 1-4.**

There was a significantly [$\chi^2(8, n=987) = 30.02, p < .001$] different proportion of youth in the three grade levels (grades 1-4; grades 5-8; and grades 9-12) who indicated that both or neither parents fished. Percentages of youth indicating that both parents fished declined with grade level (33% for grades 1-4; 28% for grades 5-8; and 23% for grades 9-12). Percentages of youth indicating that neither parent fished increased with grade level (15% for grades 1-4; 16% for grades 5-8; and 25% for grades 9-12).

There was *not* a significant [$\chi^2(6, n=765) = 4.63, p = .59$] grade-based difference in the proportions of youth in the different grade levels in their responses to how much their father fished. Those in all three grade cohorts said their father fished “a lot” ranged in the 30th percentile, and responses that their father fished “a little” ranged in the 40th percentile.

There was *not* a significant [$\chi^2(6, n=286) = 8.36, p = .21$] grade-based difference in the proportions of youth in the different grade levels in their responses to how much their mother fished. Most youth, regardless of grade cohort, reported that their mother fished “a little” or “did

not fish much at all.” Only 7% of youth in grades 1-4 reported their mother fished “a lot,” 14% of grades 5-8 and 19% of grades 9-12 reported their mother fished “a lot.”

The top three fishing companions who taught youth how to fish were the same regardless of grade cohort. In decreasing order of response, a father, grandfather, and an uncle first taught youth to fish.

The majority of youth, regardless of grade cohort, usually fished with their father. Most youth preferred fishing with their fathers despite grade cohort. Differences did exist between grade cohorts and other fishing companions excluding the choice of father. Lower grade-level youth usually fished with immediate family, but as youth grew older their desire to fish with friends either older or of the same age became more apparent. It appeared that for lower grade-level youth, fishing was more strongly associated as a solely family affair and as youth grew older and gained more independence, fishing associations broadened.

Lower grade-level children usually fished with and preferred to fish with family. Lower grade-level youth in grades 1-4 usually fished with their father (77%), grandfather, (14%) and/or mother (13%). A significantly $[\chi^2(2, n=1031) = 46.90, p < .001]$ greater proportion of youth in the lower grades (77% of those in grades 1-4; 67% of those in grades 5-8, and 51% of those in grades 9-12) usually fished with their father. A significantly $[\chi^2(2, n=1031) = 12.16, p < .01]$ greater proportion of youth in lower grade levels (14% for grades 1-4; 9% for grades 5-8; and 6% for grades 9-12) usually fished with their grandfather.

As youth grew older, those who reported fishing with their father, grandfather, and/or mother decreased and those who fished with friends increased. Though fathers remained the usual fishing companion of youth in grades 9-12, fishing with friends became more important. A significantly $[\chi^2(2, n=1029) = 75.48, p < .001]$ greater proportion of youth in grades 9-12 usually

fished with friends the same age compared to other grade cohort levels. A quarter (25%) of respondents in grades 9-12 usually fished with friends the same age compared to 8% of respondents in grades 5-8 and 4% of respondents in grades 1-4. Eight percent of youth in grades 9-12 compared to 5% each in grades 5-8 and 1-4 usually fished with older friends as well.

Most youth in grades 1-4 not only usually fished with family, mainly their father, but also preferred to fish with their father (64%) or mother (15%). There was a significant [$\chi^2(2, n=1129) = 23.82, p < .001$] grade-based difference in the proportions of youth in the different grade levels (64% in grades 1-4; 50% in grades 5-8; and 45% in grades 9-12) who preferred to fish with their father. There was a significant [$\chi^2(2, n=1129) = 16.53, p < .001$] difference in the proportions of youth in the different grade levels who preferred to fish with their mother. This pattern showed that the choice to fish with their mother declined with grade-level (15% for grades 1-4; 8% for grades 5-8; and 6% for grades 9-12).

Just as more youth in grades 9-12 usually fished with friends than any other grade cohort, youth in grades 9-12 also preferred to fish with friends more than any other grade cohort. There was a significant [$\chi^2(2, n=1129) = 25.69, p < .001$] grade-based difference in the proportions of youth in the different grade levels that preferred to fish with friends. Over a quarter (27%) of youth in grades 9-12 preferred to fish with friends the same age compared to 18% of respondents in grades 4-8 and 13% of respondents in grades 1-4.

As grade-level increased, youth reported they had more friends who fished. There was a significant [$\chi^2(6, n=1130) = 61.41, p < .001$] difference in the proportions of youth in the different grade levels in their assessment of how many of their friends fished. As grade-level increased so did the proportions of those indicating that “a lot” of their friends fished (18% for grades 1-4; 30% for grades 5-8; and 34% for grades 9-12). The proportion of youth indicating

that “a few” of their friends fished declined with grade level (60% for those in grades 1-4; 58% for those in grades 5-8; and 50% for those in grades 9-12). This discrepancy in the amount of friends who fished may be indicative of the fact that higher grade-level youth are fishing more with friends and that lower grade-level youth usually fished with an immediate family member. Rather than stating that few young youth are fishing, these percentages show that lower grade-level youth, probably due to the fact that fishing is more closely tied to the family at this age, have less awareness of whether their friends fished. On the other hand, higher grade-level youth more often fished with friends and are probably more keenly aware of whether their friends fished.

Fishing is viewed as being “cool” most by youth in grades 1-4. Though youth of all grade cohorts think fishing is either “a little cool” or “very cool” the youngest youth in grades 1-4 reported fishing as being “cool” more than any other grade cohort. However, youth’s idea of fishing as a positive activity changes little after grade 4. Identical overall combined percentages of respondents in grades 5-8 as well as grades 9-12 reported fishing as “cool” (combined “a little cool” and “very cool,” 79%) or “not cool at all” (16%). There was a significantly [$\chi^2(6, n=1129) = 15.19, p < .05$] greater proportion of youth indicating that fishing was “very cool” in the lower grade levels (26% in grades 1-4, 18% in grades 5-8, and 19% in grades 9-12), and “not cool at all” in the upper grade levels (16% in grades 9-12, 16% in grades 5-8, and 8% in grades 1-4).

Fishing License and Species Data

Overall

- **Twenty-six percent of South Carolina youth between the ages of 16-18 have purchased a fishing license.**

Twenty-six percent of South Carolina youth between the ages of 16-18 have purchased a South Carolina fishing license and of those who purchased a fishing license, an overwhelming

majority (72%) said the fact that they were required to buy a fishing license did not keep them from going fishing. However, 25% of those who *had* purchased a fishing license *did* report that the fact that they had to buy a fishing license was a restriction on going fishing.

Of those who purchased a fishing license, the largest percentage (36%) purchased a combination fishing license, 23% purchased a resident fishing license, and 11% purchased a resident junior outdoorsman license. Thirty percent of those who had a fishing license did not know what type of fishing license they used.

Most youth, who fished, fished for bass (38%) followed by, “anything that bites” (26%). Other popular species for youth who fished were catfish (16%), bream (15%) and unidentified species (11%) – youth reporting “don’t know.” Eight other fish species were named, each with less than ten percent reporting.

Gender

- **A significantly greater proportion of male youth (39%) had purchased a South Carolina fishing license compared to 11% of female youth.**
- **Most youth, both male (68%) and female (88%), who purchased a fishing license reported that the fact that they had to purchase a fishing license did not restrict them from going fishing.**

A significantly [$\chi^2(2, n=327) = 33.29, p < .001$] greater proportion of male youth had purchased a South Carolina fishing license. Thirty-nine percent of male youth compared to 11% of female youth, 16-18 years of age, purchased a South Carolina fishing license. Conversely, just over half (54%) of male youth, 16-18 years of age had never purchased a fishing license while over four-fifths (84%) of female youth, 16-18 years of age had never purchased a fishing license.

Most youth, both male (68%) and female (88%), who purchased a fishing license reported that the fact that they had to purchase a fishing license did not restrict them from going fishing. Though interesting, a non-significantly [$\chi^2(2, \underline{n}=85) = 3.81, p = .15$] larger percentage of male youth (29%) (relative to 6% of females) did report that the fact that they had to purchase a fishing license did restrict them from going fishing even though more male youth than female youth *had* purchased a fishing license.

The types of fishing licenses purchased varied widely between male and female youth. Most male youth (41%) purchased a combination fishing license, while only 13% of female youth purchased a combination fishing license. In contrast, most female youth (38%) purchased a resident fishing license, while 20% of male youth purchased a resident fishing license. In addition, 15% of male youth purchased a resident junior outdoorsman license while zero percent of female youth purchased this license.

Female youth were significantly [$\chi^2(2, \underline{n}=896) = 41.87, p < .001$] more likely to fish for “anything that bites” (30%) or to not be able to identify the species of fish (19%) they usually fished for compared to male youth (22% “anything that bites” and 6% unidentified). There was a significantly [$\chi^2(2, \underline{n}=896) = 45.94, p < .001$] greater proportion of male youth who fished for bass and bream [$\chi^2(2, \underline{n}=895) = 11.71, p < .01$] than female youth.

Grade

Most youth, regardless of age, usually fished for bass. More youth in grades 9-12 (28%) fished for “anything that bites” than younger youth (24% for both grades 1-4 and grades 5-8). As would be expected more youth in grades 1-4 did not know what types of fish they usually fished for, compared to 10% of grades 5-8 and 11% of grades 9-12.

Interest in Outdoor Recreational Activities and Fishing Clubs Overall

- **Fishing (saltwater and freshwater combined) was the second most popular outdoor recreational activity youth had participated in during the last twelve months.**
- **Youth were most interested in fishing from a boat (85%) although few youth actually participated in boating activities.**
- **A small percentage (11%) of South Carolina youth currently belong to an animal or outdoor club.**
- **Sixty percent of youth are interested in joining an animal or outdoor club.**

The number one outdoor recreational activity that South Carolina's youth participated in during the last twelve months was biking. Biking was followed by fishing (saltwater or freshwater combined). Sixty-nine percent of South Carolina youth biked followed by 62% of youth who fished within the last twelve months. Other popular outdoor recreational activities in which a majority of youth participated in during the last twelve months were freshwater fishing (55%), and visiting a state or National Park (52%). Youth (in order of decreasing frequency) said that, in the past twelve months, they had participated in:

- Watching wild animals or bird watching (49%)
- Hiking (40%)
- Camping in a tent (40%)
- Motor boating (37%)
- Camping in a wilderness area (33%)
- Saltwater fishing (32%)
- Target shooting (30%)
- Canoeing or kayaking (25%)

- Jet skiing (21%)
- Hunting big game, such as deer or turkey (17%)
- Hunting small game, such as squirrel or rabbits (16%)
- Water skiing (14%)
- Camping in a recreational vehicle, such as a Winnebago (13%)
- Rock climbing (11%)
- Row boating (10%)
- Sailing (8%)
- Hunting waterfowl, such as ducks or geese (6%)

In general, water sports other than freshwater fishing, were rated relatively low with less than a third to as little as 8% reporting other various water sports. Other consumptive outdoor recreational activities (i.e. hunting) were rated by less than 17% of youth as activities they had participated in during the last twelve months.

Respondents were read a list of different types of fishing and asked if they were interested in participating in any of these activities. The most popular type of fishing youth were *interested* in was fishing from a boat (85%). Other types of fishing that had high interest were fishing from the bank of a lake or river (80%) and fishing from a spot in your area made for fishing (70%). Sixty-seven percent of youth were interested in bait fishing, 59% in deep-sea fishing, and 53% in fishing from the beach. The only type of fishing that did not have a majority reporting interest was fly fishing which had just under a third (32%) of youth reporting being interested in fly fishing.

Even though fishing from a boat had the highest *interest* from youth, few youth had actually participated. Thirty-seven percent had been motor boating, canoeing (25%), row

boating (10%), or sailing (8%) in the last twelve months. So even though interest in fishing from a boat is high, it appears that few youth have opportunities to fish from a boat. Boating may be a means to further the initial interest that young children in South Carolina seem to bring to the sport. It is something they want to do, but tend not to do.

A small percentage (11%) of South Carolina youth currently belong to an animal or outdoor club. Despite the fact that 88% of youth do not belong to an animal or outdoor club, 60% of youth would join a club that helped them learn about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live there. Sixty-one percent of youth would join a club that helped them learn more about fishing.

Gender

- **Both male and female youth reported the same top two outdoor recreational activities participated in during the last twelve months: biking and fishing (saltwater or freshwater) though female youth participated in fishing at lower rates than male youth.**
- **When male and female youth were presented with different types of fishing and asked if they were interested in participating in each type of fishing, female youth, in general, showed less interest than male youth in all of the different types of fishing presented to them.**
- **A significantly greater proportion of male youth (13% relative to 7% of females) indicated that they belonged to an outdoor club.**

Both male and female youth reported the same top two outdoor recreational activities participated in during the last twelve months: biking and fishing (saltwater or freshwater) though female youth participated in fishing at lower rates than male youth.

Freshwater fishing, specifically, was the third most popular outdoor recreational activity for male youth (63%) but was the fifth most popular outdoor recreational activity for female youth (46%).

Water sports/activities seemed to have little variation in participation levels between genders except for motorboating and water skiing. A nearly significantly [$\chi^2(2, n=1147) = 4.97, p = .08$] greater proportion of male youth (40% relative to females with 34%) indicated that they had participated in motorboating. A significantly [$\chi^2(2, n=1147) = 8.62, p < .05$] greater proportion of male (17%) than female youth (11%) had participated in water skiing.

Differences in outdoor recreational activities existed within the general categories of hunting and camping. All outdoor recreational activities that pertained to hunting – target shooting, hunting small game, hunting big game, and hunting waterfowl – were participated in mostly by male youth. A significantly [$\chi^2(2, n=1147) = 153.96, p < .001$] greater proportion of male youth (45% relative to 11.2% for females) indicated they participated in target shooting. A significantly [$\chi^2(2, n=1148) = 67.30, p < .001$] greater proportion of male youth (26% relative to 7% for females) hunted big game. A significantly [$\chi^2(2, n=1147) = 102.17, p < .001$] greater proportion of male youth (26% relative to 4% of females) hunted small game animals. A significantly [$\chi^2(2, n=1147) = 38.36, p < .001$] greater proportion of male youth (10% relative to 1% for females) hunted waterfowl.

Camping was another activity mostly participated in by male youth. Though strong percentages of female youth camped, higher percentages of male youth camped in a tent, camped in a wilderness area, and camped in a recreational vehicle. A significantly [$\chi^2(2, n=1147) = 43.55, p < .001$] greater proportion of male youth (48% relative to 29% of females) indicated

they camped in a tent. Also, a significantly [$\chi^2(2, \underline{n}=1147) = 29.63, p < .001$] greater proportion of male youth (39% relative to 25% of females) camped in a wilderness area.

Other significant differences between genders did exist among two other outdoor recreational activities: hiking and rock climbing, and a small difference existed for biking. A significantly [$\chi^2(2, \underline{n}=1147) = 11.87, p < .01$] greater proportion of male youth (44% relative to 35% females) hiked. A significantly [$\chi^2(2, \underline{n}=1147) = 6.10, p < .05$] greater proportion of male youth (13% relative to 9% for females) rock climbed. A nearly significantly [$\chi^2(2, \underline{n}=1147) = 5.62, p = .06$] greater proportion of male than female youth biked (71% relative to 67% for females).

When male and female youth were presented with different types of fishing and asked if they were interested in participating in each type of fishing, female youth, in general, showed less interest than male youth in all of the different types of fishing presented to them.

Significantly [$\chi^2(2, \underline{n}=1147) = 36.69, p < .001$] more male youth (39% relative to females, 23%) were interested in fly fishing. Significantly [$\chi^2(2, \underline{n}=1147) = 33.14, p < .001$] more male youth (66% relative to females, 50%) were interested in deep-sea fishing. Significantly [$\chi^2(2, \underline{n}=1147) = 15.83, p < .001$] more male youth (72% relative to females 61%) were interested in bait fishing. Significantly [$\chi^2(2, \underline{n}=1147) = 7.65, p < .05$] more male youth (87% relative to females, 83%) were interested in fishing from a boat. There were no significantly different proportions of youth interested in fishing from the bank of a lake or river based on gender [$\chi^2(2, \underline{n}=1147) = .08, p = .96$].

A significantly [$\chi^2(2, \underline{n}=1144) = 12.02, p < .01$] greater proportion of male youth (13% relative to 7% of females) indicated that they belonged to an outdoor club, though as noted overall, most South Carolina youth do not belong to an animal or outdoor club. A significantly

$[\chi^2(2, n=1143) = 33.04, p < .001]$ greater proportion of male youth (68% relative to 52% of females) indicated that they would join a club that helped them learn more about fishing. Female youth (62%) were slightly more likely than male youth (59%) to join a club that helped them learn about South Carolina aquatic habitats than taught them how to fish. The difference in gender for youth interested in joining a club that helped them learn more about South Carolina's rivers, ponds, lakes or streams and the animals and plants that lived there was very small (62% males, 59% females).

Grade

- **The most popular outdoor recreational activity for grades 1-4 and grades 5-8 was biking.**
- **The most popular outdoor recreational activity for grades 9-12 was fishing.**
- **Interest in a joining a club to learn about fishing or to learn about South Carolina aquatic habitat was strongest among the youngest grade cohort (grade 1-4) with over three-quarters of youth in grades 1-4 interested in joining an animal or outdoor club.**

The most popular outdoor recreational activity for grades 1-4 and grades 5-8 was biking.

The most popular outdoor recreational activity for grades 9-12 was fishing.

Differences among grade cohorts were found in several areas. Low n-values make practical application small but are clinically significant.

In relation to hunting and grade cohorts a significantly $[\chi^2(2, n=1129) = 7.71, p < .05]$ greater proportion of middle grades (19% in grades 5-8 relative to 17% in grades 9-12, and 11% in grades 1-4) hunted small game. A significantly $[\chi^2(2, n=1129) = 10.06, p < .01]$ greater

proportion of youth in the upper grade levels (21% in grades 9-12 relative to 16% in grades 5-8, and 12% in grades 1-4) hunted big game.

As for water sport/activities, more middle grade-level youth went canoeing/kayaking or row boating while the more active water sports – motorboating, jet skiing, and water skiing were most often done by higher grade-level youth. A significantly [$\chi^2(2, n=1130) = 13.31, p < .001$] greater proportion of youth in grades 5-8 (31%) went canoeing or kayaking compared to those in grades 9-12 (24%) and grades 1-4 (20%). A significantly [$\chi^2(2, n=1129) = 14.45, p < .001$] greater proportion of youth in the upper grade levels (44% for grades 9-12; 34% for grades 5-8; and 31% for grades 1-4) went motorboating, jet skiing, [$\chi^2(2, n=1129) = 31.67, p < .001$] and water skiing [$\chi^2(2, n=1128) = 30.59, p < .001$].

Additional significant differences for popular activities among grade cohorts included the following findings. Youth in the lower grade levels were more likely to bike; youth in the middle grade levels were more likely to view wildlife; youth in the upper grade levels were more likely to camp in a wilderness area. A significantly [$\chi^2(2, n=1129) = 57.53, p < .001$] greater proportion of youth in the lower grade levels (80% in grades 1-4, 77% in grades 5-8, and 57% in grades 9-12) biked. A significantly [$\chi^2(2, n=1129) = 27.52, p < .001$] greater proportion of youth in grades 5-8 (58% relative to 52% in grades 1-4; 41% in grades 9-12) watched wild animals or bird watched. A significantly [$\chi^2(2, n=1129) = 19.93, p < .001$] greater proportion of youth in the upper grade levels (38% for grades 9-12; 34% for grades 5-8; and 22% for grades 1-4) camped in a wilderness area.

When presented with different types of fishing and asked if they were interested in participating in each type of fishing, little variation between grade cohorts existed. There was a steady increase in interest in deep-sea fishing. Significantly [$\chi^2(2, n=1129) = 17.23, p < .001$]

more youth in the upper grade levels (56% for grades 9-12; 58% for grades 5-8; and 50% for grades 1-4) were interested in deep sea fishing. There was no significant [$\chi^2(2, n=1130) = 1.11, p = .58$] differences in the proportions of youth in the different grade levels in their interest in fly fishing, in their interest in bait fishing [$\chi^2(2, n=1130) = 1.24, p = .54$], in their interest in fishing from a boat [$\chi^2(2, n=1129) = 1.48, p = .48$], or their interest in fishing from the bank of a lake or river [$\chi^2(2, n=1130) = 3.99, p = .14$].

Little variation existed between grade cohorts in youth who belonged to an animal or outdoor club.

Interest in joining a club to learn about fishing or to learn about South Carolina aquatic habitat was strongest among the youngest grade cohort (grade 1-4) and decreased as youth grew older. Over three-quarters of youth in grades 1-4 were interested in joining a club either to learn about South Carolina aquatic habitats (78%) or to learn how to fish (79%). A significantly [$\chi^2(4, n=1129) = 65.36, p < .001$] greater proportion of children in grades 1-4 indicated they would join a club that helped them learn more about South Carolina's rivers, ponds, lakes, or streams and the animals and plants that lived there (78% in grades 1-4; 63% in grades 5-8; and 48% in grades 9-12). A significantly [$\chi^2(4, n=1130) = 73.94, p < .001$] greater proportion of children in the lower grade levels indicated they would join a club that helped them learn about fishing (79% in grades 1-4; 63% in grades 5-8; and 48% in grades 9-12).

Higher grade-level youth (grade 9-12) were the least likely to be interested in joining a club with less than a majority of youth in grades 9-12 saying they had an interest in joining a club that either helped them learn more about South Carolina's aquatic habitats (48%) or how to fish (48%).

Awareness of the South Carolina Department of Natural Resources and its Fishing Programs

Overall

- **Ten percent of South Carolina youth could correctly identify the South Carolina Department of Natural Resources as the state agency that managed and conserved wildlife.**
- **Twenty-one percent of youth were aware of SCDNR programs’ “Hooked on Fishing,” “Fishing Tackle Loaner Program,” or “South Carolina Reel Kids.”**
- **The top three factors rated as making SCDNR aquatic events or classes *better* were:**
 - 1) if youth could be at the event or class with their friends (95%),**
 - 2) if youth could win prizes at the event (93%) and**
 - 3) if youth could enjoy nature and the outdoors while at the event (91%).**

Ten percent of youth were able to name the South Carolina Department of Natural Resources and an additional 4% gave an inaccurate derivative of the SCDNR as the state agency responsible for managing and conserving fish and wildlife in South Carolina. Conversely, three-quarters of South Carolina youth did not know who the state agency is that is responsible for managing and conserving fish and wildlife in South Carolina. Many other organizations were named by youth that ranged from units as general as game wardens to specific federal and state agencies.

Few youth were aware of South Carolina Department of Natural Resources’ programs that targeted fishing participation. Twenty-one percent of youth had awareness of the programs “Hooked on Fishing,” “Fishing Tackle Loaner Program,” or “South Carolina Reel Kids.”

Respondents of this survey were asked to rate the South Carolina Department of Natural Resources’ (SCDNR) efforts to help kids learn about lakes, ponds and rivers and the animals that live there as well as SCDNR’s events that teach kids about fishing. Respondents were read a

series of questions that targeted nineteen different topics related to fishing and aquatic education that might be included in SCDNR events and/or classes and asked to rate each topic for whether it would make a fishing event or class better, worse or not make a difference. All nineteen topics presented to respondents were rated by a majority as making a class better. The three topics with the highest support were 1) if they could be at the event or class with their friends (95%) 2) if they could win prizes at the event (93%) and 3) if they could enjoy nature and the outdoors while at the event (91%). The following lists, ranks in decreasing order are the remaining sixteen topics and the support as making an event better.

- Could catch a big fish (89%)
- Got to keep the fishing equipment (87%)
- Learned how to fish safely (87%)
- Learned how to safely handle and release a fish (86%)
- Could catch a lot of fish (86%)
- Went to the event during school time as on a field trip (85%)
- Learned to fish better (84%)
- Could relax and just get away from it all while fishing (84%)
- Were able to fish at the event or class (83%)
- Learn to identify fish and also facts about fish (83%)
- Learned about fishing equipment (81%)
- Learned where you could go fishing after the event or class (75%)
- Received a certificate for attending (73%)
- Got to keep the fish you caught (67%)
- Could be there with your parents (65%)

- Got to eat the fish you caught (55%)

Of the nineteen topics presented to youth, all but two were reported by less than ten percent as making a class or event worse. Most of the topics reported to make a class or event worse were reported by three or less percent of youth. Two topics "learned how to fish safely" and "if the event were during school time as on a field trip" were reported by 17% and 11% respectively as making an event or class worse.

Gender

- **A significantly greater proportion of male youth (14%) compared to female youth (6%) correctly identified the South Carolina Department of Natural Resources as the state agency responsible for managing and conserving fish and wildlife in South Carolina.**
- **Male youth were generally more supportive of activities that dealt with the physical act of catching fish. More male than female youth reported “catching a big fish,” “catching a lot of fish,” “keeping the fish they caught” and “being able to eat the fish they caught” would make the class or event better.**
- **More female youth reported ethical/moral activities would make an event or class better including, “learning how to fish safely such as how to cast properly and that hooks are sharp” and “learning how to safely handle and release a fish.”**

A significantly [$\chi^2(1, n=1142) = 18.46, p < .001$] greater proportion of male youth (14%) compared to 6% of female youth correctly identified the South Carolina Department of Natural Resources as the state agency responsible for managing and conserving fish and wildlife in South Carolina. In comparison, significantly fewer female youth [$\chi^2(1, n=1143) = 38.90, p < .001$] indicated that they did not know the name of the SCDNR (84% relative to 68% of males). A

significantly [$\chi^2(1, n=1143) = 6.55, p < .01$] greater proportion of male youth also (5% relative to 2% for females) indicated an incorrect derivative of the SCDNR.

Most of the nineteen topics relating to what would make SCDNR aquatic classes or events better or worse had no gender variations. However, two general differences did appear between male and female youth. Those activities that dealt with the physical act of fishing were significantly more important to positive fishing experiences for male youth. A significantly [$\chi^2(3, n=1143) = 20.26, p < .001$] greater proportion of male youth (90% relative to 82% females) indicated that “catching lots of fish” would make an event better, whereas, more female youth (16% relative to 9% males) indicated that it would not make any difference to an event. A significantly [$\chi^2(3, n=1143) = 15.09, p < .01$] greater proportion of male youth indicated that “catching a big fish” would make an event better. More female youth (14% relative 7% males) indicated that it would not make any difference to the event. A significantly [$\chi^2(3, n=1143) = 19.66, p < .001$] greater proportion of male youth relative to female youth indicated that “getting to keep the fish they caught” would make an event better (72% of males relative to 60% of females). A significantly [$\chi^2(3, n=1143) = 35.55, p < .001$] greater proportion of male youth (62% relative to 46% of females) indicated that “getting to eat the fish they caught” would make an event better, whereas more female youth relative to male youth indicated that “eating the fish” would make an event either worse (22% females relative to 13% males) or not make any difference (31% females relative to 23% males). Overall, the goal for many males when fishing is to actually catch fish. Though other aspects of fishing are important to males such as relaxing (for older males), the objective still remained to catch fish.

On the other hand, more female youth reported ethical/moral activities would make an event or class better including, “learning how to fish safely such as how to cast properly and that

hooks are sharp” and “learning how to safely handle and release a fish.” A significantly [$\chi^2(3, n=1144) = 23.9911, p < .001$] greater proportion of female youth (89% relative to 83% males) indicated that “learning how to safely handle and release fish” would make an event better. More male youth (16% relative to 9% females) indicated that this would not make any difference to an event. A nearly-significantly [$\chi^2(3, n=1143) = 7.60, p = .06$] greater proportion of female youth (89% relative to 85% of males) indicated that “learning how to fish safely” would make an event better. More male youth (15% relative to females, 9%) indicated that it would not make any difference.

Grade

- **Significantly more youth (17%) in grades 9-12 correctly identified the South Carolina Department of Natural Resources as the agency responsible for managing and conserving wildlife in South Carolina than any other grade cohort.**
- **Programs targeted toward the youngest anglers in grades 1-4 should be closely tied to the family whereas programs targeting higher grade-level youth anglers in grades 9-12 should focus on including more socialization opportunities.**
- **Youth in grades 1-4 liked to keep the fish they catch more than any other grade cohort.**
- **Youth in grades 1-4 viewed receiving some token or certificate as a positive component to a fishing event or class.**
- **A significantly greater proportion of children in the lower grade levels indicated that learning how to identify fish and learning facts about fish would make an event better.**

- **Middle grade-level youth appeared to have advanced in their participation in and thinking of fishing to areas of skill development.**
- **The combination of fishing and socializing is important to higher grade-level youth anglers.**
- **Older youth were much more concerned than lower grade-level youth with the simple act of fishing and of fishing in order to "relax and get away from it all while fishing."**

As would be expected, as grade-level increased, the ability to correctly identify the South Carolina Department of Natural Resources as the state agency responsible for managing and conserving wildlife in South Carolina also increased. Significantly [$\chi^2(2, n=1130) = 39.74, p < .001$] more youth (17%) in grades 9-12 correctly identified the SCDNR as the agency responsible for managing and conserving wildlife in South Carolina than any other grade cohort (relative to 8% in grades 5-8; and 3% in grades 1-4). In addition, significantly [$\chi^2(2, n=1129) = 38.89, p < .001$] more of the youngest youth in grades 1-4 did not know (86%) the agency who was responsible for managing and conserving wildlife in South Carolina (relative to 77% for grades 5-8; and 66% for grades 9-12).

Even though more youth in grades 9-12 could accurately identify the SCDNR, only 17% of youth in grades 9-12 identified the SCDNR. The low numbers of youth in all grade cohorts who identified the SCDNR reflects the lack of awareness of who the SCDNR is and what they do among the state's youth.

When activities that might improve or worsen fishing and aquatic classes were examined by grade cohort levels, several opinions varied by grade level. As has been noted earlier in this report and in other studies by Responsive Management (2001) keeping the fish that youth catch

is an important fishing component for youth in grades 1-4. Youth in grades 1-4 learn mostly from hands-on experiences and relate fishing directly to the fish they catch. A significantly [$\chi^2(6, n=1130) = 18.39, p < .01$] greater proportion of children in the lower grade levels (73% for grades 1-4; 65% for grades 5-8; and 65% for grades 9-12) indicated that “getting to keep the fish they caught” would make an event better. However, interestingly, even though youth in grades 1-4 would like to keep the fish they caught, they are not necessarily interested in eating them. A significantly [$\chi^2(6, n=1129) = 45.56, p < .001$] greater proportion of children in the lower grade levels indicated that “getting to eat the fish they caught” would make an event worse (25% for grades 1-4; 21% for grades 5-8; and 9% for grades 9-12).

Youth in grades 1-4 viewed receiving some token or certificate as a positive component to a fishing event or class. Significantly [$\chi^2(6, n=1127) = 28.30, p < .001$] more youth in grades 1-4 (83%) said receiving a certificate for attending an event or class would make an event or class better, compared to decreasing numbers of 73% for respondents in grades 5-8 and 66% of respondents in grades 9-12. Increasingly larger percentages of children in the upper grade levels indicated that receiving a certificate would not make any difference (15% for grades 1-4; 25% for grades 5-8; and 33% for grades 9-12). Youth in grades 1-4 tend to associate fishing with a physical tangible experience such as catching a fish or receiving a token from the fishing event or class. Physical tangible reminders of fishing such as keeping the fish, receiving a certificate, a small piece of fishing equipment, or even a photo of the child at a fishing event or class would help make the fishing experience more enjoyable for lower grade-level youth. As youth grow older, fishing tends to be enjoyed more for psychological-social reasons such as learning a skill or relaxing and getting away from it all.

A significantly [$\chi^2(6, n=1129) = 22.27, p < .001$] greater proportion of children in the lower grade levels indicated that learning “how to identify fish” and learning “facts about fish” would make an event better (89% for grades 1-4; 84% for grades 5-8; and 78% for grades 9-12). As well as learning facts about fishing, lower grade-level youth also desired to learn “how to fish safely.” A significantly [$\chi^2(6, n=1128) = 15.92, p < .05$] greater proportion of children in the lower grade levels indicated that “learning to fish safely” would make an event better (90% in grades 1-4; 89% in grades 5-8; and 83% in grades 9-12).

Middle grade-level youth appeared to have advanced in their fishing participation and in their thinking of fishing to areas of skill development. Middle grade-level youth showed a greater motivation to learn the skills of fishing. Youth in grades 5-8 reported more highly than any other grade cohort that learning “how to fish better” would be a positive component to a fishing event or class. Eighty-eight percent of respondents in grades 5-8 compared to 83% and 81% of youth in grades 1-4 and 9-12 respectively felt learning “how to fish better” would improve an event or class.

Older youth were much more concerned than lower grade-level youth with the simple act of fishing and of fishing in order to “relax and get away from it all while fishing.” A significantly [$\chi^2(6, n=1129) = 12.70, p < .05$] greater proportion of youth in grades 9-12 indicated “being able to fish at the event or class” would make an event better (81% in grades 1-4; 83% in grades 5-8, and 85% in grades 9-12). A significantly [$\chi^2(6, n=1129) = 101.50, p < .001$] greater proportion of children in the upper grade levels indicated that “relaxing and getting away from it all” would make an event better (67% for grades 1-4; 85% for grades 5-8; and 95% for grades 9-12). Conversely, zero youth in grades 9-12 reported being able to relax at an event or class

would make it worse, however 8% of lower grade-level youth in grades 1-4 reported relaxing at an event or class and getting away from it all would make the event or class worse.

The fact that youth in grades 9-12 were more concerned with the relaxation of fishing reflected the fact that adults generally fish as a result of a combination of relaxation and social and naturalistic values. The intangibles of fishing - the experience, camaraderie, friends and family, relaxation and being outdoors - were what motivated adult anglers; and as youth anglers grow older, they grow into similar adult motivations for fishing.

The disparities among grade cohorts in regards to activities to improve fishing events or classes warrant special review. As was found in the focus groups, different grade cohorts have different fishing motivations that should be incorporated into SCDNR fishing events or classes. Successful fishing events or classes are best targeted to different grade cohorts and designed with the specific needs of each grade cohort in mind. Different grade cohorts have different educational and cognitive skill levels with different approaches to the natural world. These differences in approaches to the natural world produce different needs for the role of outdoor activities and fishing in the lives of youth. Successful programs to promote fishing among youth anglers will require different approaches to different grade cohort levels.

For example, lower grade-level anglers, in grades 1-4 appear to need to have family members successfully incorporated into the event or class. The addition of receiving some sort of token or certificate for attendance would enhance the event for lower grade-level anglers. Middle grade-level anglers, grades 5-8 are advancing in their thinking of fishing and desire to learn more about the skills of fishing and fish species. Possible ways to meet middle grade-level anglers desire for more targeted skill training may be to focus specifically on target areas of fishing such as fly-fishing or how to read a river.

Because older youth (grades 9-12) have greater socialization needs in fishing and greatly increased skill levels, fishing events or classes need to be designed with these in mind. Older youth anglers need to feel that fishing events and classes are tailored to them and are not the same as fishing events or classes for lower grade-level youth. Higher grade-level youth anglers need to have events that are centered around socialization with other youth their age with less emphasis on their own family. Possibly designing clinics with a choice of coming with or without a family member may entice youth in grades 9-12 to join and enjoy fishing events or clinics. Youth in grades 9-12 need the opportunity to interact with other youth either through something as casual as an event lunch or in a structured “team” setting where youth anglers are grouped together to complete a variety of tasks or where instruction can take place among a small group of youth anglers.

Aquatic Information and Computers

Overall

- **Nearly 80% of South Carolina youth used the Internet.**
- **A minority of youth who used the Internet, accessed the Internet to find information on aquatic animals (48%), aquatic habitats (33%) or information about fishing (18%).**

The majority of youth had contact with computer fishing games or hand held fishing games and the Internet. However few youth used the Internet as a resource for aquatic or fishing information. Those electronic resources available through the SCDNR and other websites are either unknown to youth or youth simply do not have the need or desire to find information on aquatic resources or fishing via the Internet.

Slightly more youth used the Internet (78%) than played with a computer fishing game or hand held fishing game (71%) though a sizeable majority had done both. Nearly 80% of youth

used the Internet, though few youth who used the Internet searched for information to learn about aquatic resources. Forty-eight percent of youth Internet users accessed the Internet to find information on aquatic animals, and 33% of youth Internet users accessed the Internet to find information about aquatic habitats. Less than a quarter of youth Internet users (18%) accessed the Internet to find information about fishing.

Gender

More male than female youth played computer fishing games or hand held fishing games and used the Internet to find information about fishing. A significantly [$\chi^2(2, n=1144) = 39.75, p < .001$] greater proportion of male youth (78% relative to 61% of females) than female youth had played a computer fishing game. There was little difference between male and female youth in their use of the Internet, though male and female Internet users used the Internet to find different *kinds* of information. Significantly [$\chi^2(2, n=892) = 9.52, p < .01$] more male youth (22% relative to females 14%) used the Internet to find information about fishing, while a significantly [$\chi^2(2, n=892) = 17.29, p < .001$] greater proportion of female youth (55% relative to 42% males) used the Internet to find information about aquatic animals.

Grade

A significantly [$\chi^2(4, n=1131) = 15.61, p < .01$] greater proportion of children in the upper grade levels had played a computer fishing game or hand held fishing game (62% in grades 1-4 relative to 75% and 72% in grades 5-8 and grades 9-12 respectively). As age increased, usage of the Internet increased drastically. A significantly [$\chi^2(4, n=1130) = 133.94, p < .001$] greater proportion of children in the upper grade levels used the Internet (54% in grades 1-4; 83% in grades 5-8; and 89% in grades 9-12). Although slightly more youth in grades 9-12 used the Internet than youth in grades 5-8, those youth in grades 5-8 used the Internet considerably more to find information on fishing and aquatics. Youth Internet users in grades 5-

8 followed by youth Internet users in grades 1-4 and then youth Internet users in grades 9-12 used the Internet to find information mostly on aquatic animals, then aquatic habitats and finally fishing.

The Internet was used least to find information about fishing. Significantly [$\chi^2(4, n=885) = 12.59, p < .05$] more youth in grades 5-8 used the Internet to find information about fishing (18% for grades 1-4; 23% for grades 5-8; and 14% for grades 9-12).

Fishing and Aquatic Resource Information within Schools

Overall

- **More youth had seen or heard information that helped them learn more about fishing or increased their interest in going fishing *outside* of school (45%) than *in* school (22%).**
- **Fifty-three percent of youth were in a school class, within the last twelve months, that did something to help them learn about the oceans and the animals and plants that live in the ocean, and 46% of youth were in a school class, within the last twelve months, that did something to help them learn about South Carolina’s rivers, ponds, lakes or streams and the animals and plants that live in South Carolina’s aquatic habitats.**
- **A majority of youth reported they would like to learn even more in school about South Carolina’s rivers, ponds, lakes or streams and the animals and plants that live in South Carolina’s aquatic habitats (80%) as well as learn more about fishing in school (68%).**

More youth had seen or heard information that helped them learn more about fishing or increased their interest in going fishing *outside* of school (45%) than *in* school (22%). Though it should be noted that less than a majority of youth heard anything outside (54%) or inside (76%) of school that helped them learn more about fishing or increased their interest in fishing.

When the 22% of youth who reported having seen or heard information about fishing in schools were asked what specifically they had seen or heard, two general response types were found: what youth had heard information about, and from whom/where in school youth had seen or heard information about fishing. Of responses falling under the category of what kind of

information youth had seen or heard about fishing, most (43%) had seen or heard information about fish such as species types, 24% had heard or seen information about the act of fishing, and 19% had seen or heard information about aquatic environments. Other specific responses seen or heard about fishing had less than ten percent reporting.

Responses falling under the category of from whom/where in school youth had seen or heard information about fishing included, 24% from classroom instruction and 20% from teachers. Other specific responses given regarding where information was seen or heard had less than ten percent reporting.

Despite the fact that only 22% of youth reported having seen or heard information about fishing *in* schools, 53% of youth were in a school class, within the last twelve months, that did something to help them learn about the oceans and the animals and plants that live in the ocean. Forty-six percent of youth were in a school class, within the last twelve months, that did something to help them learn about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live in South Carolina's aquatic habitats.

South Carolina youth are very interested in learning about aquatic resources. A large majority of youth (80%) reported they would like to learn more *in* school about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live in South Carolina's aquatic habitats. Sixty-eight percent of youth also wanted to learn more about fishing in school.

Gender

- **A significantly greater proportion of male youth (51% relative to 38% of females) indicated that they had heard information *outside* of school that helped them learn more about fishing and/or that increased their interest in going fishing.**
- **More male youth had seen or heard information about fish species, the act of fishing, and fishing skills than female youth in school.**

- **A significantly greater proportion of male youth (23% relative to 13% of females) indicated that they heard information in school through their teacher through informal stories etc.**
- **Female youth were more likely than male youth to have heard about fishing through formal classroom instruction.**

A significantly [$\chi^2(2, n=1142) = 19.33, p < .001$] greater proportion of male youth (51% relative to 38% of females) indicated that they had heard information *outside* of school that helped them learn more about fishing and/or that increased their interest in fishing.

There was little difference between male (21%) and female (24%) youth in the information seen or heard about fishing *in* school, though there was a significant difference in the media through which male and female youth heard information in school and the type of information male and female youth heard.

More male youth had seen or heard information about fish species, the act of fishing, and fishing skills than female youth in school. A significantly [$\chi^2(1, n=250) = 4.87, p < .05$] greater proportion of male youth (9% relative to 3% females) indicated that they heard information in the schools about fishing skills that made them more interested in fishing.

A significantly [$\chi^2(1, n=250) = 4.73, p < .05$] greater proportion of male youth (23% relative to 13% of females) indicated that they heard information in school through their teacher through informal stories etc. That male youth reported hearing information on fishing informally from teachers may be due to the fact that males are stereotypically more interested in fishing, and thus talking about fishing to male youth is more likely to occur than with female youth.

Female youth were more likely than male youth to have heard about fishing through formal classroom instruction. A significantly [$\chi^2(1, n=251) = 4.25, p < .05$] greater proportion of

female youth (27% relative to 16% males) indicated that they had heard information through classroom instruction. Again, the fact that female youth reported hearing information about fishing through formal instruction may be due to the fact that formal instruction is not discriminate of gender and all students would be exposed to information on fishing through classroom instruction. The fact that more male youth reported receiving fishing information informally may represent the fact that male youth more than female youth talked about fishing outside of a formal classroom setting.

Smaller differences, though statistically significant, included a [$\chi^2(1, n=1134) = 4.96, p < .05$] greater proportion of male youth (3% relative to 1% females) had their interest in fishing increased *in school* by reading a poster, book or flyer; learning about good places to fish [$\chi^2(1, n=1134) = 5.09, p < .05$] (4% of males relative to 2% of females); as a result of friends [$\chi^2(1, n=1134) = 9.28, p < .01$] (8% of males relative to 4% for females); watching TV shows about fishing or fish [$\chi^2(1, n=1135) = 4.48, p < .05$] (5% relative to 2% of females); and learning fishing skills [$\chi^2(1, n=1135) = 7.47, p < .01$] (8% relative to 4% of females).

Little to no difference existed between male and female youth when asked, “did your school class do anything to help you learn...” about aquatic resources in a school class within the last twelve months. Equal percentages (53%) of male and female youth reported learning about oceans and oceanic plants and animals in a school class. Only slightly more female (48%) than male youth (45%) had learned about South Carolina’s rivers, ponds, lakes or streams and the animals and plants that lived there in a school class.

The equal percentages of male and female youth reporting learning about aquatics in a school class may be due to the “valence” of the information. Facts about fish have no gender specificity. It is interesting to see that gender-neutral information (i.e., information with no male

or female “valence” attached to it) is readily distributed and absorbed by males and females. It is in the area of information about the *act* of fishing, a heavily valenced activity, that information becomes less uniformly distributed among males and females. It is likely that this is due to gender-based unequal distribution (i.e., females less-included in discussions about fishing) and/or acceptance (females self-censuring/screening information that they believe to be gender inappropriate).

Nearly equal percentages of male (81%) and female (80%) youth wanted to learn more about South Carolina’s aquatic resources. However, significantly [$\chi^2(2, n=1142) = 17.87, p < .001$] more male (73%) than female youth (61%) wanted to learn more about fishing in school. Female youth were much more likely to want to learn about aquatic resources (80%) in school than simply fishing (61%).

Grade

- **More youth in grades 5-8 than any other grade cohort reported having seen or heard information both inside (27%) and outside (51%) of school about fishing.**
- **Youth, 8th grade and under, with their strong ties of fishing and family, reported hearing information outside of school from their father.**
- **For youth in grades 5-8 simply seeing activities related to fishing and people fishing outside of school increased their interest levels in fishing.**
- **Specifically pertaining to information seen or heard in school about fishing, as age increased classroom instruction and informally from a teacher were increasingly reported to increase interest in fishing.**
- **Regardless of grade cohort, learning about fish species and types in school increased interest in fishing.**

- **Generally, as grade level increased, youth reporting having learned about South Carolina's aquatic resources in a school class within the last year decreased.**
- **An overall majority of all grade cohorts wanted to learn more about both "rivers, ponds, lakes or streams and the animals and plants that live in South Carolina's aquatic habitats" and "fishing."**
- **There was a steady decline in interest level in learning about "fishing" as grade increased.**

More youth in grades 5-8 than any other grade cohort reported having seen or heard information both inside (27%) and outside (51%) of school about fishing within the last twelve months. A significantly [$\chi^2(4, n=1129) = 19.20, p < .001$] greater proportion of youth in grades 5-8 (27% in grades 5-8 relative to 19% in grades 1-4 and 21% in grades 9-12) had heard information *in school* and *outside* [$\chi^2(4, n=1130) = 21.88, p < .001$] (51% in grades 5-8; 41% in grades 1-4; 43% in grades 9-12) of school that had increased their interest in fishing. Generally, few youth in grades 1-4 had seen or heard information either inside or outside of school about fishing and youth in grades 9-12 fell somewhere in between for having seen or heard information about fishing inside or outside of school within the last twelve months.

Information seen or heard *outside* of school that increased interest in fishing varied somewhat by grade level. A significantly [$\chi^2(2, n=1121) = 18.97, p < .001$] greater proportion of youth in grades 1-8 indicated that they had their interest in fishing increased outside of school by learning fishing skills (11% in grades 1-4; 8% in grades 5-8; 3% in grades 9-12).

Youth, 8th grade and under, with their strong ties of fishing and family, reported their father gave them information about fishing. Significantly [$\chi^2(2, n=1121) = 15.47, p < .001$] more

youth in the lowest grade levels indicated that they had their interest in fishing increased outside of school by their father (11% each for grades 1-4 and grades 5-8, 4% for grades 9-12).

For youth in grades 5-8, simply seeing activities related to fishing and people fishing outside of school increased their interest levels in fishing. A significantly [$\chi^2(2, n=1121) = 16.70, p < .001$] greater proportion of youth in grades 5-8 had their interest increased outside of school by seeing a large quantity of something having to do with fishing. In particular, large numbers of fish, big fish, or many people fishing all were listed more often in the middle grade-level group (5% in grades 5-8 relative to 1% each in grades 1-4 and grades 9-12).

A significantly [$\chi^2(2, n=1122) = 6.32, p < .05$] greater proportion of youth in grades 9-12 had their interest increased outside of school by learning where to fish (4% in grades 9-12; 3% in grades 5-8; and 1% in grades 1-4) and increasing their knowledge and opportunities to fish.

Specifically pertaining to information seen or heard *in* school about fishing, as age increased, classroom instruction and from a teacher informally were increasingly reported to increase interest in fishing. Thirty-six percent of grades 9-12, 18% of grades 5-8, and 9% of grades 1-4 had learned about fishing from classroom instruction. Twenty-six percent of grades 9-12, 19% of grades 5-8, and 13% of grades 1-4 reported hearing information from a teacher informally as an avenue of increasing interest in fishing.

Regardless of grade cohort, learning about fish species and types in school increased interest in fishing. Over half (56%) of youth in grades 1-4, 48% of grades 5-8, and 31% in grades 9-12 reported learning about fish species in school increased their interest in going fishing. Other popular topics seen or heard in school that increased interest for all grade cohorts was learning about aquatic environments and learning about the act of fishing itself.

Few youth in grades 1-4 reported having seen or heard information about fishing within the last twelve months *in school*, however, youth in grades 1-4 reported at the highest level for having learned about oceans, oceanic animals and plants (66%), South Carolina's rivers, ponds, lakes or streams and the plants and animals that live in South Carolina's aquatic habitats (63%) in a school class.

Generally, as grade level increased, youth reporting having learned about South Carolina's aquatic resources in a school class within the last year decreased. A significantly [$\chi^2(4, n=1130) = 65.52, p < .001$] greater proportion of lower grade level youth indicated they had learned about oceans and the animals and plants that live there, (66% in grades 1-4; 58% in grades 5-8; 43% in grades 9-12) in a school class in the last 12 months. A significantly [$\chi^2(4, n=1129) = 96.97, p < .001$] greater proportion of youth in the lower grade levels indicated that they had learned about South Carolina's aquatic resources in a school class within the past 12 months (63% in grades 1-4; 53% in grades 5-8; and 30% in grades 9-12).

An overall majority of all grade cohorts wanted to learn more about both "rivers, ponds, lakes or streams and the animals and plants that live in South Carolina's aquatic habitats" and "fishing." There was a steady decline in interest level in learning about "fishing" as grade increased. A significantly [$\chi^2(4, n=1128) = 34.57, p < .001$] greater proportion of youth in the lower grade levels indicated that they would like to learn more about South Carolina's aquatic resources in school (90% in grades 1-4; 81% in grades 5-8; and 76% in grades 9-12) and fishing [$\chi^2(4, n=1130) = 56.28, p < .001$] (84% in grades 1-4; 69% in grades 5-8; and 58% in grades 9-12) in school.

Knowledge Levels of Aquatic Resources

Overall

- **Virtually all youth knew what the word “habitat” meant.**
- **Over two-thirds of youth (67%) did not know what largemouth bass eat.**
- **The majority of youth (63%) did not know what river otters usually eat.**
- **A majority of youth (68%) knew the correct food of sharks.**

Youth were asked a variety of questions relating to fisheries and aquatic resources to assess youth’s factual knowledge of these topics. Youth were asked:

- What does habitat mean?
- What kind of food do largemouth bass eat?
- What does a river otter usually eat?
- What types of food do sharks usually eat?

Virtually all youth knew what the word habitat meant. The question pertaining to habitat was a completely open-ended response in which respondents defined the word “habitat” any way they wished. However, in summation of those comments, virtually all youth explained habitat as a place where animals lived... their home.

Over two-thirds of youth (67%) did not know what largemouth bass eat. Eighteen percent of youth correctly identified “other fish” – bream as the food of largemouth bass. Worms (17%) and bugs (7%) were also popular responses to what largemouth bass eat.

The majority of youth (63%) did not know what river otters usually eat. A quarter of youth correctly identified fish and frogs as the primary food of river otters. Seven percent of youth identified some variant of a crustacean.

A majority of youth (68%) knew the correct food of sharks, identifying saltwater fish; 20% did not know what a shark usually ate. Six percent of youth identified meat in general and an additional 6% identified freshwater fish.

Gender

In relation to the defining of the word habitat, a nearly significantly [$\chi^2(1, n=1142) = 3.73, p = .053$] greater proportion of female youth used the word “home” to describe habitat (9% females relative to 6% males).

Majorities of both male and female youth did not know what a largemouth bass ate for food. Significantly [$\chi^2(1, n=1143) = 21.77, p < .001$] more male youth (23% relative 12% females) did correctly identify “other fish” - bream as the correct answer. A significantly [$\chi^2(1, n=1143) = 57.30, p < .001$] greater proportion of female youth indicated that they did not know what largemouth bass ate (79% relative to 58% males).

More male than female youth also gave other responses of worms and bugs to what a largemouth bass eats. Significantly [$\chi^2(1, n=1143) = 13.29, p < .001$] more male youth (9% relative to 4% females) indicated that largemouth bass ate bugs. Identifying what largemouth bass eat may have been a tough question for children, as obviously fish must eat bugs and worms if they go after bait. In keeping with the observation, male youth were significantly [$\chi^2(1, n=1142) = 35.78, p < .001$] more likely to have indicated that largemouth bass ate worms than female youth (20% males relative to 8% females) which may be a result of more fishing exposure for males and their experience with using worms as bait. Exposure to fishing may be antagonistic to the proper response to this question; males, who have more fishing experience than females, tended to give the wrong answer per an association with bait.

There was a significantly [$\chi^2(1, \underline{n}=1143) = 5.26, p < .05$] greater proportion of female youth who answered that they did not know what a river otter ate (67% females relative to 60% of males). However, there was not a significant difference between male and female youth who correctly identified fish and frogs. Twenty-seven percent of male youth and 23% of female youth correctly identified fish and frogs as the usual food of river otters. A significantly [$\chi^2(1, \underline{n}=1142) = 5.64, p < .05$] greater proportion of male youth (8% relative to 5% of females) indicated that they thought river otters ate some sorts of crustaceans such as crayfish.

Identical percentages of male and female youth (68%) correctly identified saltwater fish as the food sharks usually eat. Slightly more male youth (8%) identified meat in general than female youth (5%). Significantly [$\chi^2(1, \underline{n}=1142) = 7.75, p < .01$] more female youth (8% relative to 5% of males) indicated that they thought sharks ate freshwater fish.

Grade

Two slight differences surfaced among the open-ended responses to what is habitat when examined by grade cohort. A significantly [$\chi^2(2, \underline{n}=1129) = 24.82, p < .001$] greater proportion of youth in grades 1-4 used the word “home” to describe habitat (14% for grades 1-4; 6% for grades 5-8; and 4% for grades 9-12). A significantly [$\chi^2(2, \underline{n}=1129) = 45.43, p < .001$] greater proportion of youth in the upper grade levels, particularly those in grades 5-8, used the word “live” (e.g., a place where an animal lives) to describe habitat (47% for grades 1-4; 71% for grades 5-8; and 66% for grades 9-12).

In relation to what a largemouth bass usually ate, similar percentages regardless of grade cohort responded they “did not know” or identified worms or bugs. A significantly [$\chi^2(2, \underline{n}=1130) = 9.46, p < .01$] greater proportion of youth grades 9-12 gave the correct answer

(bream) than any other grade cohort (21% for those in grades 9-12; 17% for grades 5-8; 13% for grades 1-4).

In relation to what a river otter usually ate, most youth regardless of grade cohort “did not know” what type of food a river otter usually ate. Just around a quarter of all grade cohorts identified the correct answer – fish and frogs (25% of grades 1-4, 24% of grades 5-8, and 27% of grades 9-12). A significantly [$\chi^2(2, n=1130) = 16.65, p < .001$] greater proportion of youth in grades 1-4 indicated that they thought river otters ate some sort of generic type of plant (6% in grades 1-4; 3% in grades 5-8; and 1% in grades 9-12).

In relation to what sharks usually ate, slightly more youth in grades 5-8 (70%) identified freshwater fish than youth in grades 9-12 (68%). More youth in grades 9-12 (22%) reported they “did not know” what sharks ate than any other grade cohort. A significantly [$\chi^2(2, n=1129) = 7.15, p < .05$] greater proportion of youth in grades 1-4 indicated that they thought sharks ate freshwater fish (10% in grades 1-4; 6% in grades 5-8; and 5% in grades 9-12).

DEMOGRAPHICS

The split for this study between male and female respondents was 55/45 with an even distribution between grade levels ranging from first grade to college, though the overwhelming majority of respondents for this study were between second grade and high school seniors. Most respondents (86%) were not of Hispanic or Latino ethnicity and most (74%) considered their race as white. Ten percent of respondents in this survey were Black or African American. The largest percentage of respondents (43%) considered their place of resident a small city/town with 20% reporting residence in a suburb of large metro are or a rural area. Nine percent lived in a big city or urban area.

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GRAPHS

Q9. Have you ever gone fishing in your life?							
Age	Proportion Having Ever Fished	Proportion Having Never Fished	Standard Error of the Proportion	Actual Number of Children in SC (from census)	Lower Bound of 95% Confidence Interval	Estimated Number of Children Ever Having Fished in SC	'Upper Bound of 95% Confidence Interval
8	84.71	15.29	0.03904	53,798	41,453.54	45,570.07	49,686.6
9	82.02	17.98	0.040704	57,733	42,748.11	47,354.03	51,959.96
10	87.27	12.73	0.031777	55,907	45,309.53	48,791.56	52,273.6
11	94.07	5.93	0.021746	53,471	48,019.9	50,298.99	52,578.08
12	90.71	9.29	0.024529	52,480	45,083.78	47,606.86	50,129.94
13	94.96	5.04	0.018549	52,899	48,311.85	50,235.02	52,158.19
14	97.35	2.65	0.015123	53,008	50,029.49	51,600.71	53,171.93
15	91.06	8.94	0.02573	52,281	44,968.84	47,605.46	50,242.08
16	91.43	8.57	0.02732	54,005	46,484.24	49,376	52,267.76
17	91.78	8.22	0.032146	58,431	49,946.92	53,628.45	57,309.98
18	98.08	1.92	0.019045	57,255	54,016.72	56,153.94	58,291.16
Total	91.28	8.72	0.00833	601,268	539,030.7	548,847.1	558,663.5

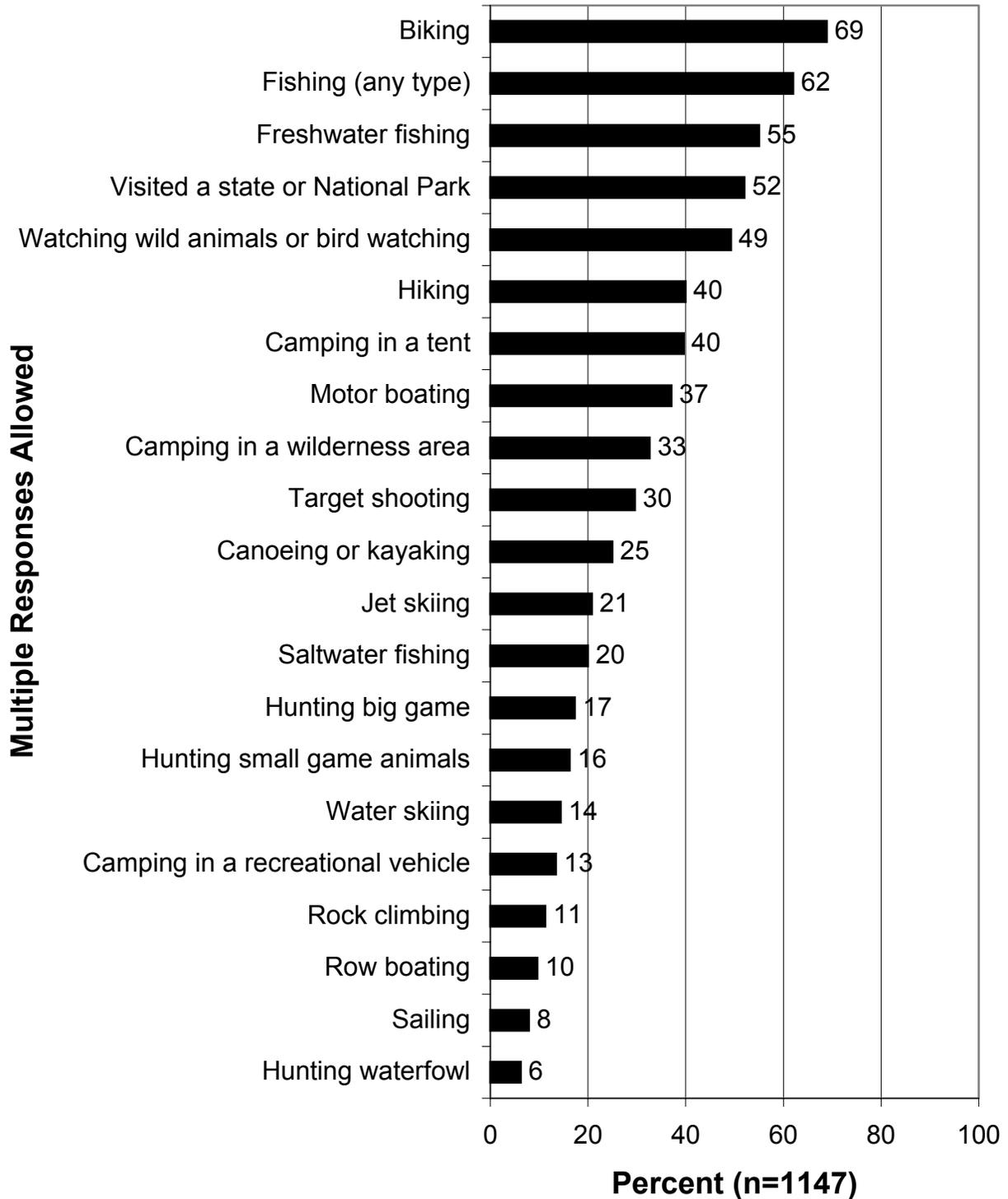
Q12. Have you gone fishing within the past 12 months?							
Age	Proportion Having Fished in the Past 12 Months	Proportion Not Having Fished in the Past 12 Months	Standard Error of the Proportion	Actual Number of Children in SC (from census)	Lower Bound of 95% Confidence Interval	Estimated Number of Children Having Fished in SC in the Past 12 Months	Upper Bound of 95% Confidence Interval
8	54.12	45.88	0.0540	53798	23415.13	29114.21	34813.30
9	64.04	35.96	0.0509	57733	31219.24	36975.07	42730.89
10	61.82	38.18	0.0463	55907	29484.80	34560.69	39636.58
11	61.86	38.14	0.0447	53471	28393.34	33079.52	37765.70
12	68.57	31.43	0.0392	52480	31950.58	35986.29	40021.99
13	63.31	36.69	0.0409	52899	29251.56	33490.01	37728.47
14	61.95	38.05	0.0457	53008	28091.52	32836.81	37582.11
15	60.98	39.02	0.0440	52281	27371.60	31878.66	36385.72
16	54.29	45.71	0.0486	54005	24171.07	29317.00	34462.93
17	56.16	43.84	0.0581	58431	26166.49	32817.41	39468.34
18	69.23	30.77	0.0640	57255	32455.58	39638.08	46820.58
Total	61.64	38.36	0.0144	601268	353695.36	370615.93	387536.51

Q16. About how many times per year do you go fishing? By Gender and Total (Portions of a day count as a whole day; multiple outings in one day count as a single day)			
Gender	N-value	Mean	Std. Deviation
Male	516	17	32
Female	385	8	25
Total	905	13	30

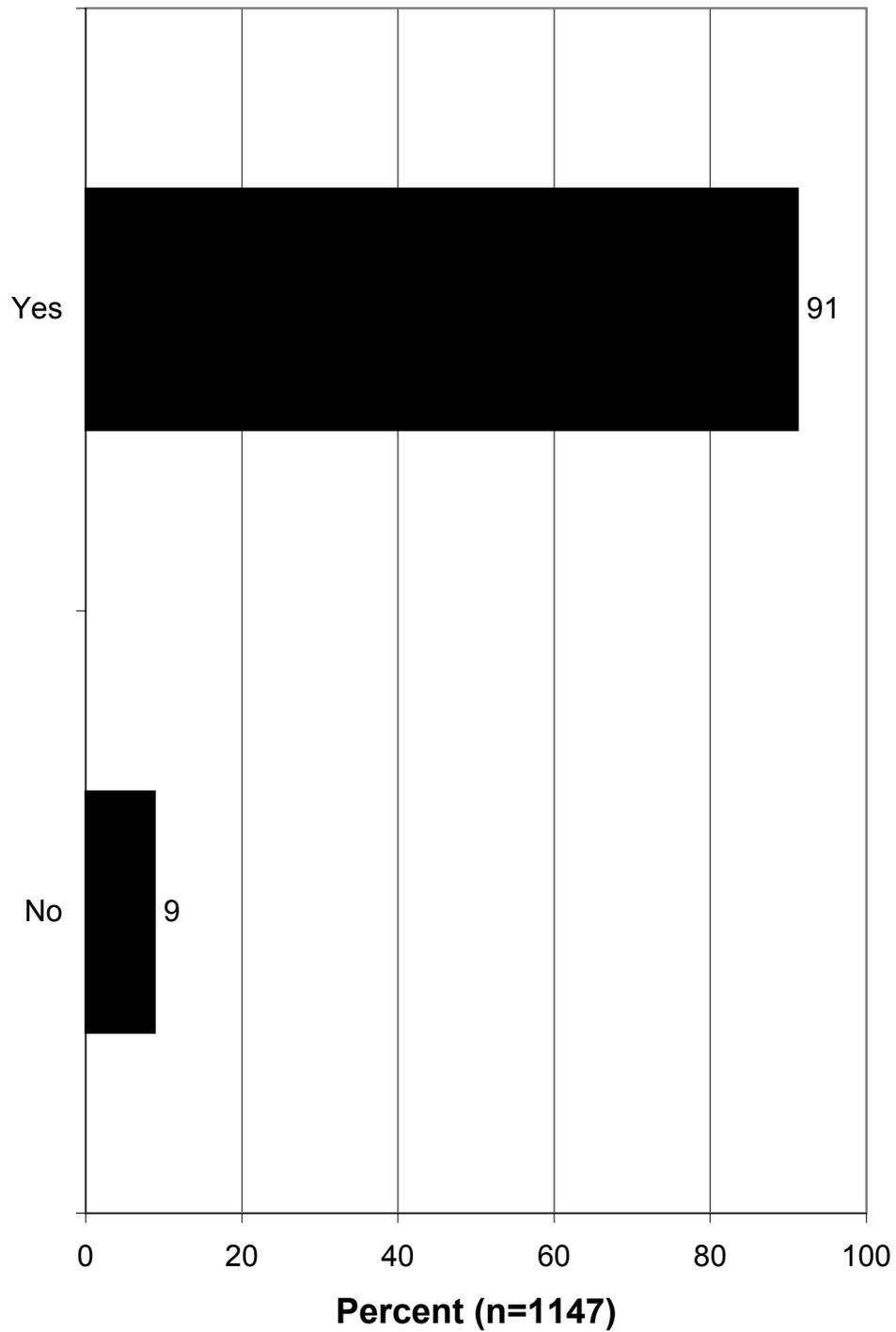
Q16. About how many times per year do you go fishing? By Grade (Portions of a day count as a whole day; multiple outings in one day count as a single day)			
Gender	N-value	Mean	Std. Deviation
Grades 1-4	187	8	20
Grades 5-8	318	12	26
Grades 9-12	384	15	36
Total	889	13	30
*Eliminates all "Don't Knows" and out-of-school respondents			

Overall Graphs

Q8. Activities participated in within the past 12 months.



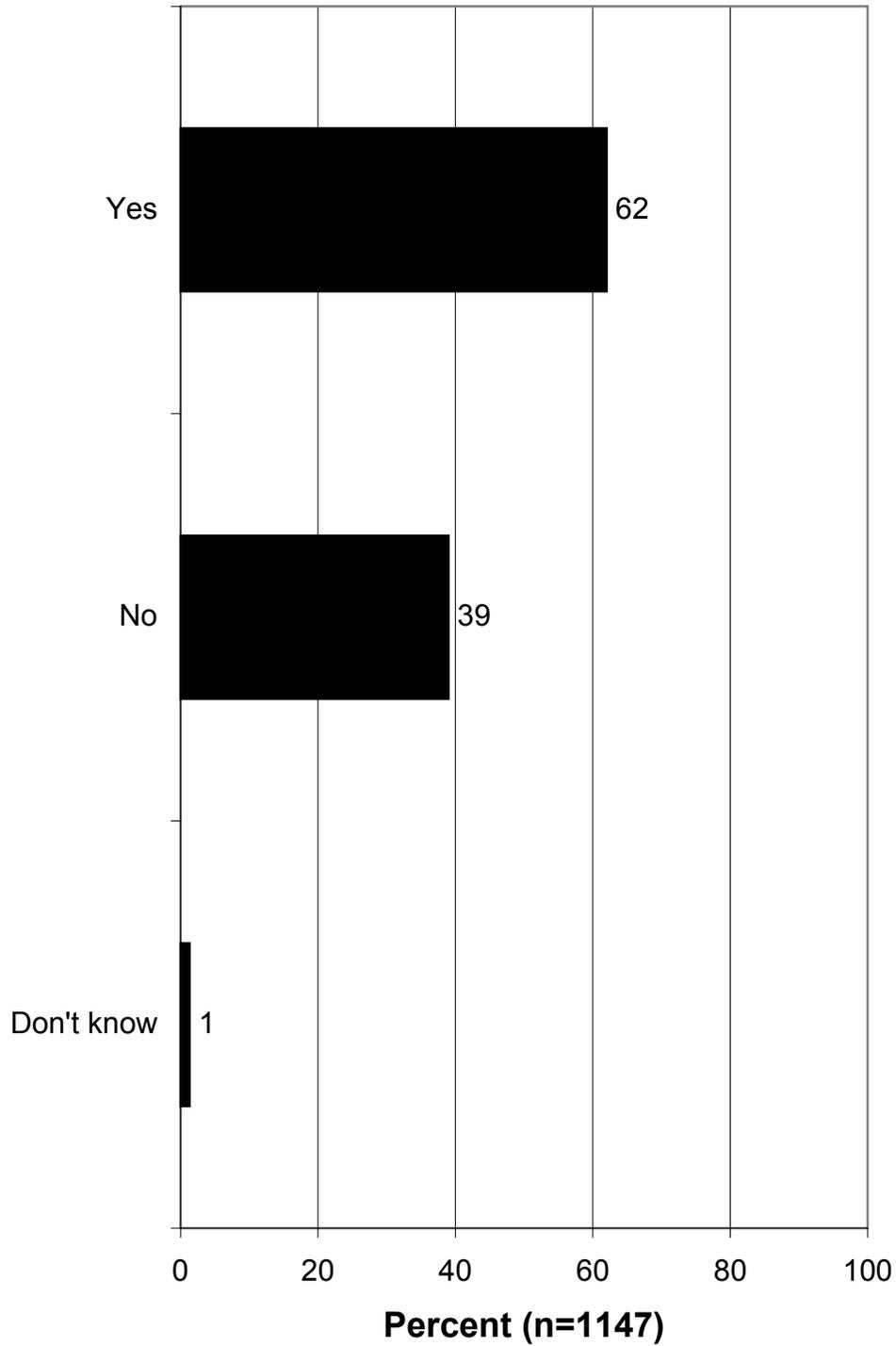
Q9. Have you ever gone fishing in your life?



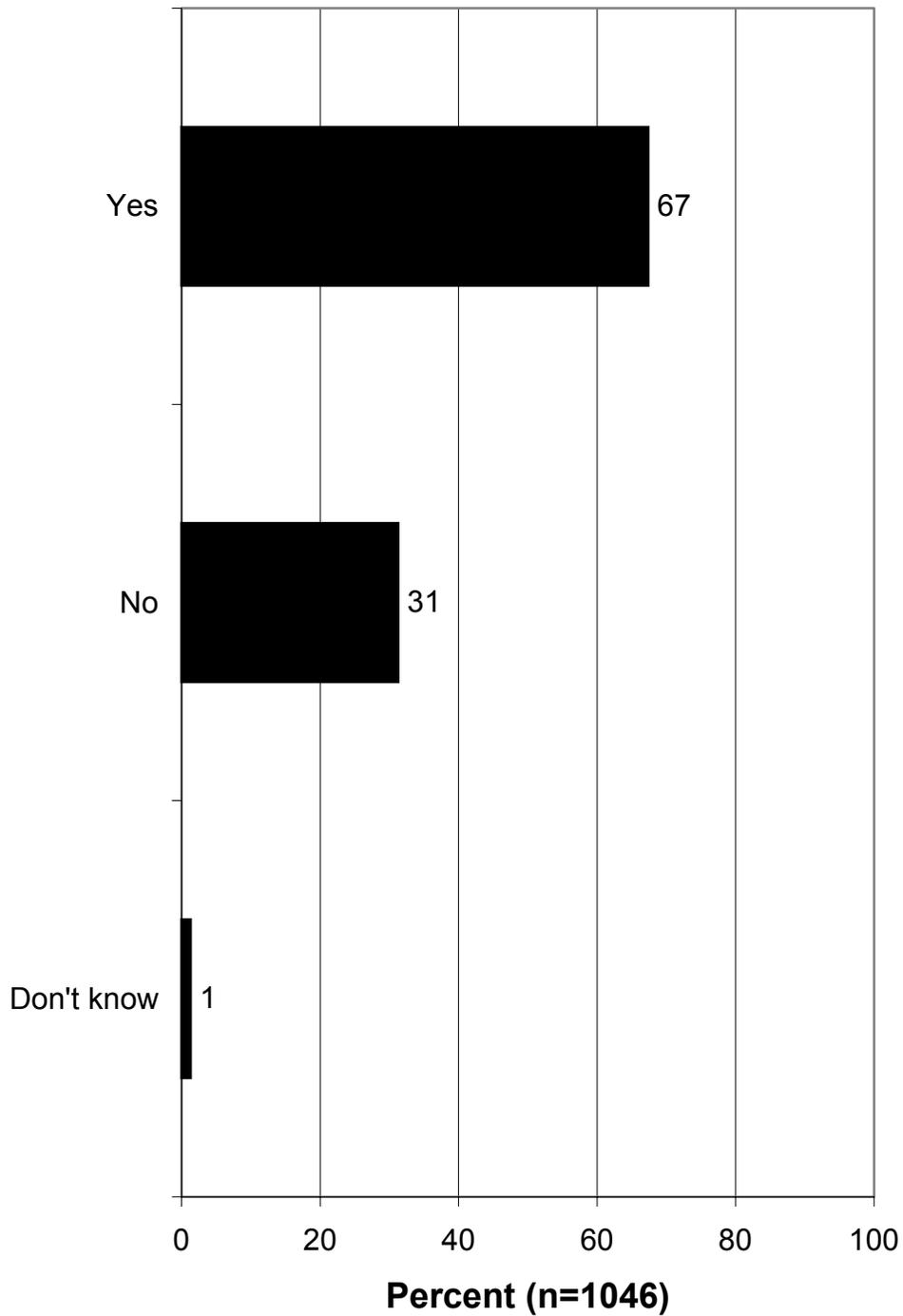
Q10. Would you say you like fishing a lot, a little, or not at all? (asked of those who reported having gone fishing in their life).



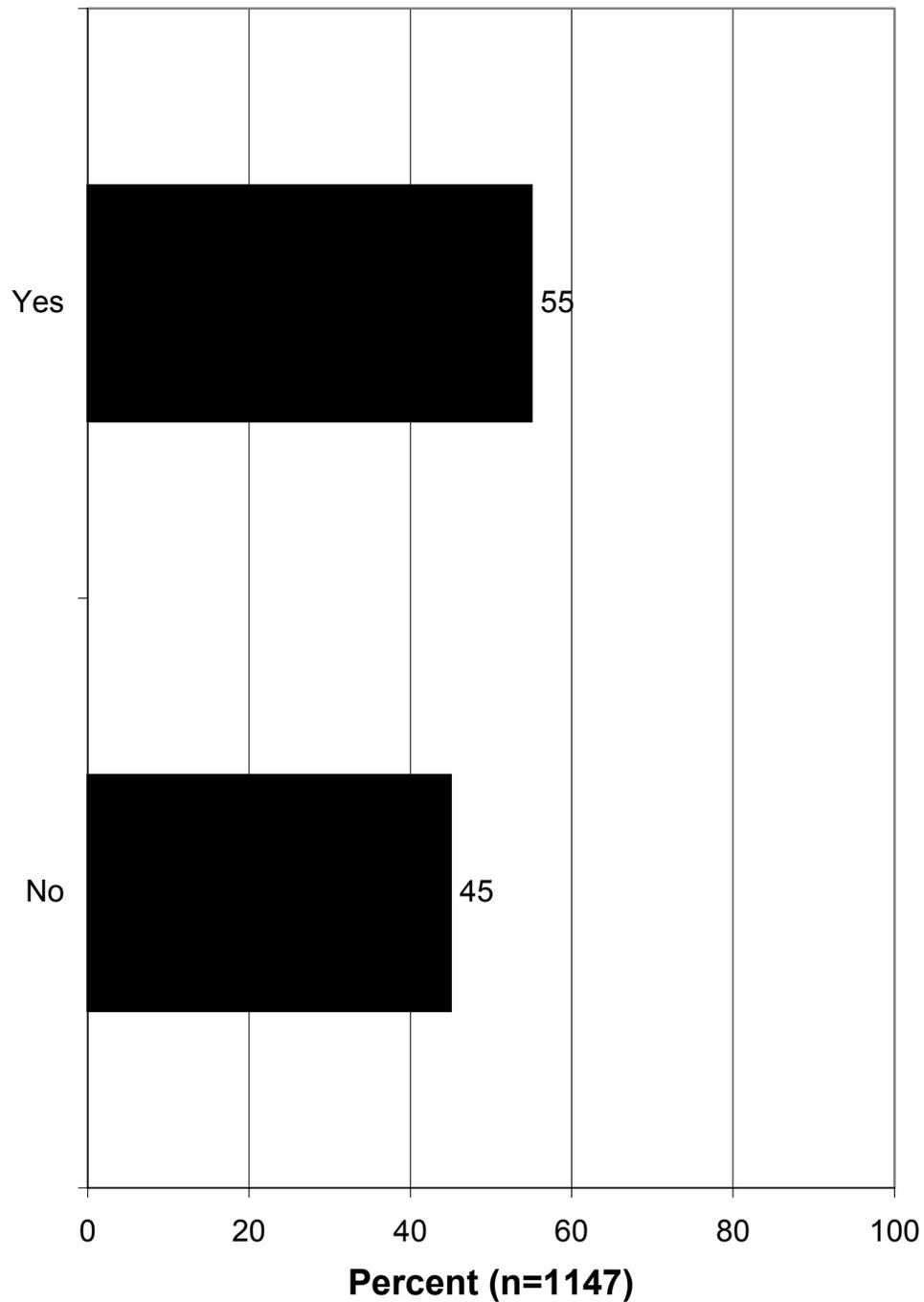
Q11. Have you gone fishing within the past 12 months? (asked of all respondents)



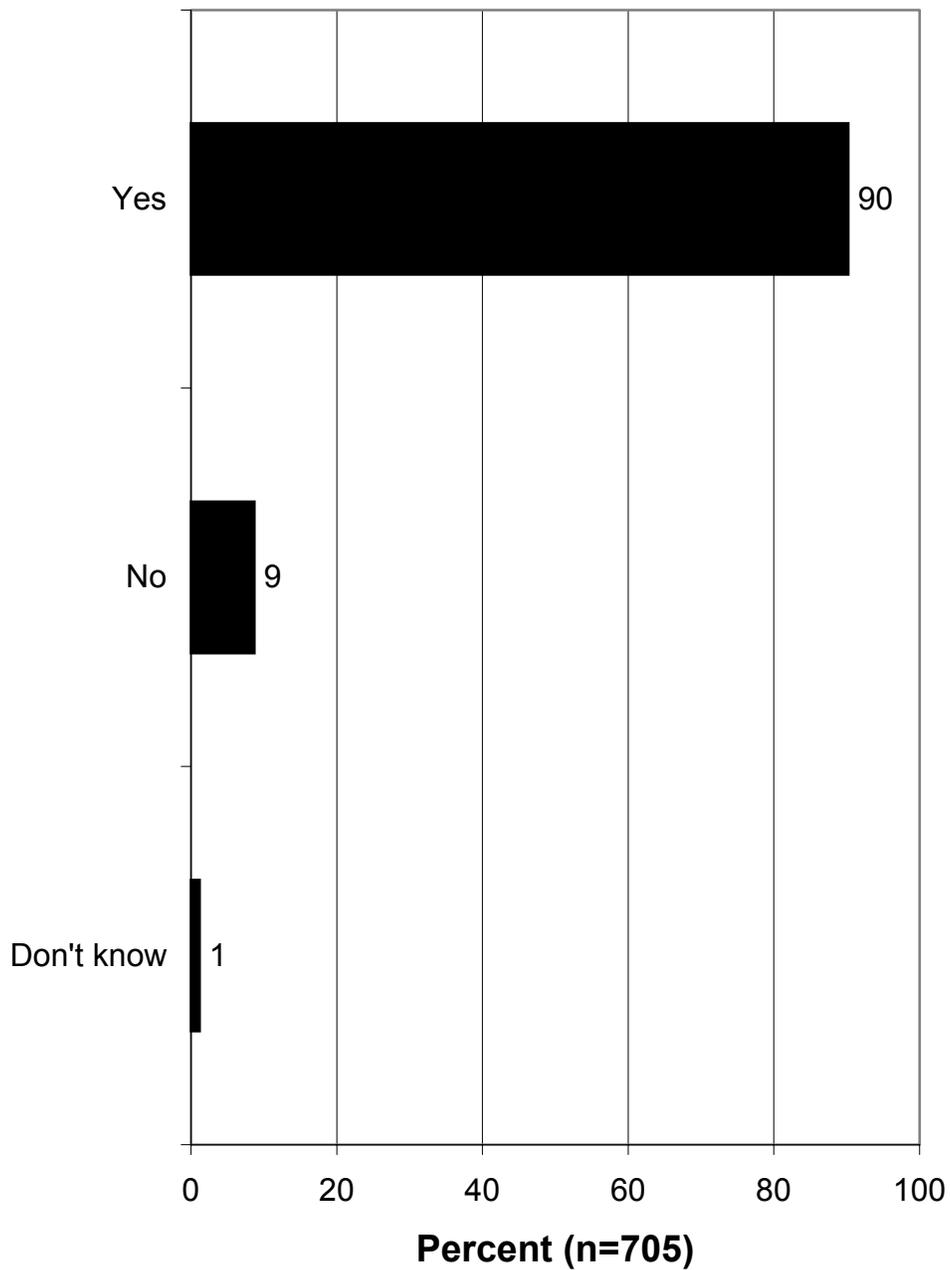
Q11. Have you gone fishing within the past 12 months? (asked of those who reported having gone fishing in their life).



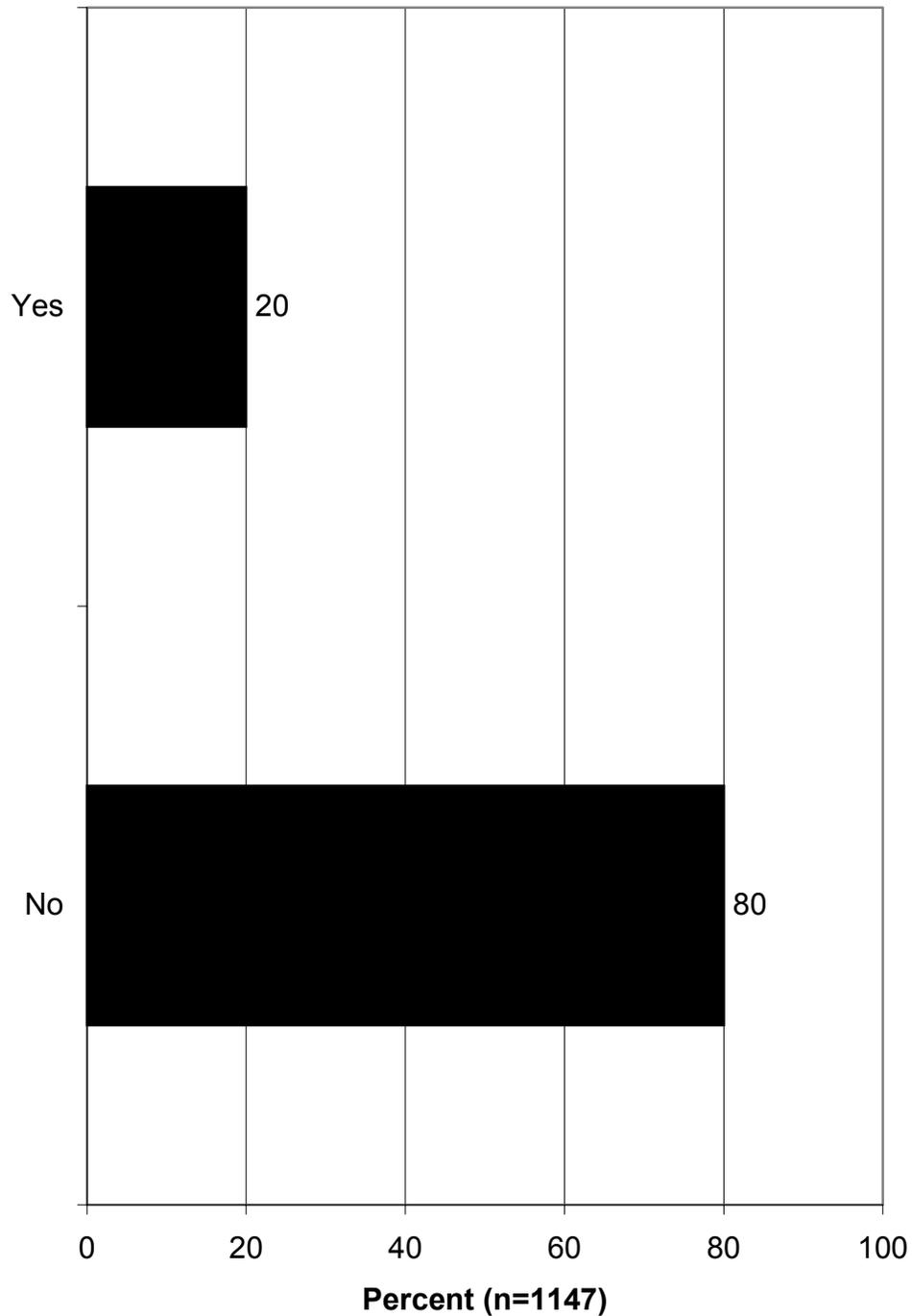
Q12. Within the past 12 months, did you go fishing in freshwater, like in ponds, lakes, streams, or reservoirs? (asked of all respondents)



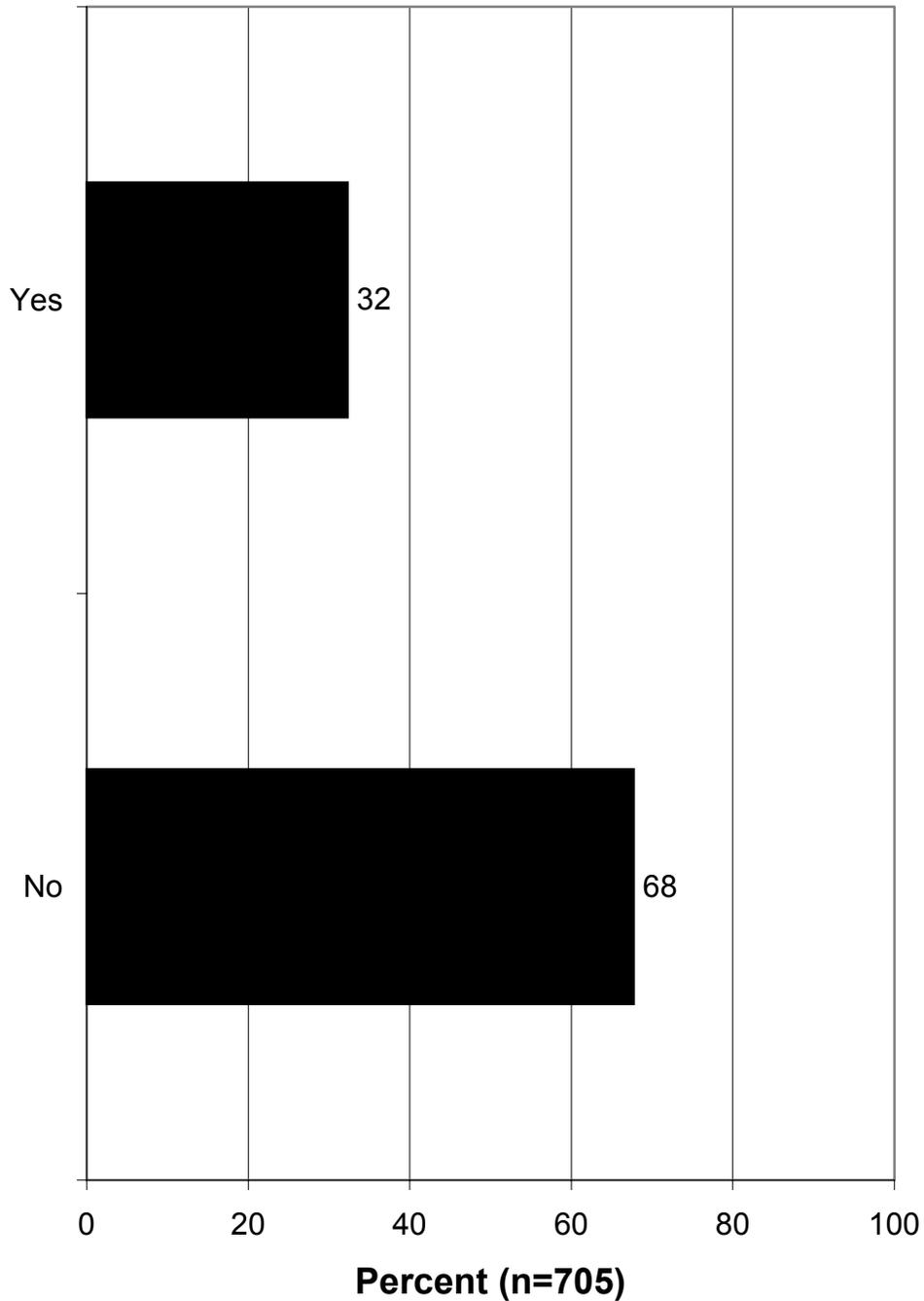
Q12. Within the past 12 months, did you go fishing in freshwater, like in ponds, lakes, streams, or reservoirs? (asked of those who have fished in the last 12 months).



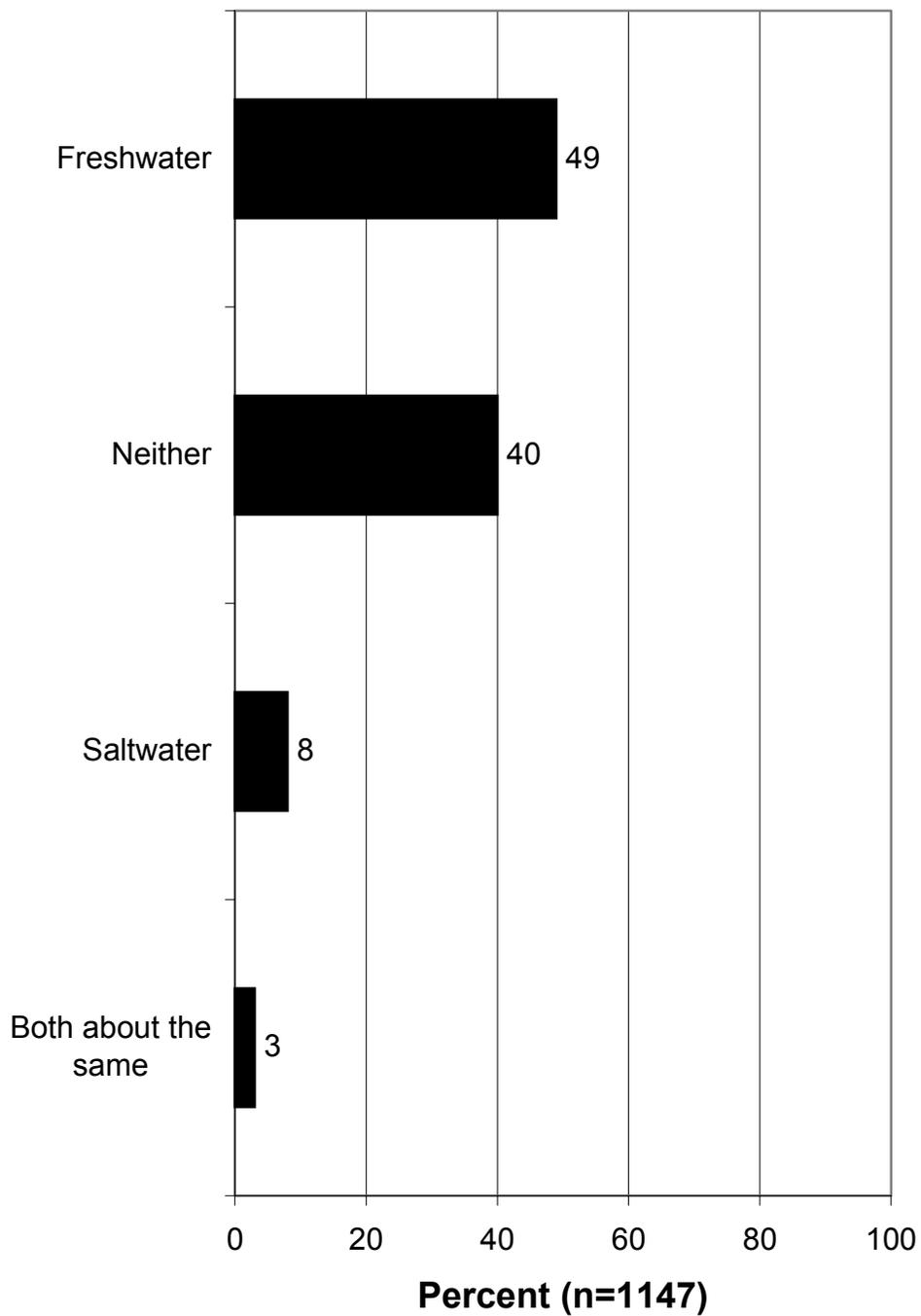
Q13. Within the past 12 months, did you go fishing in saltwater, such as at the beach or in the ocean? (asked of all respondents)



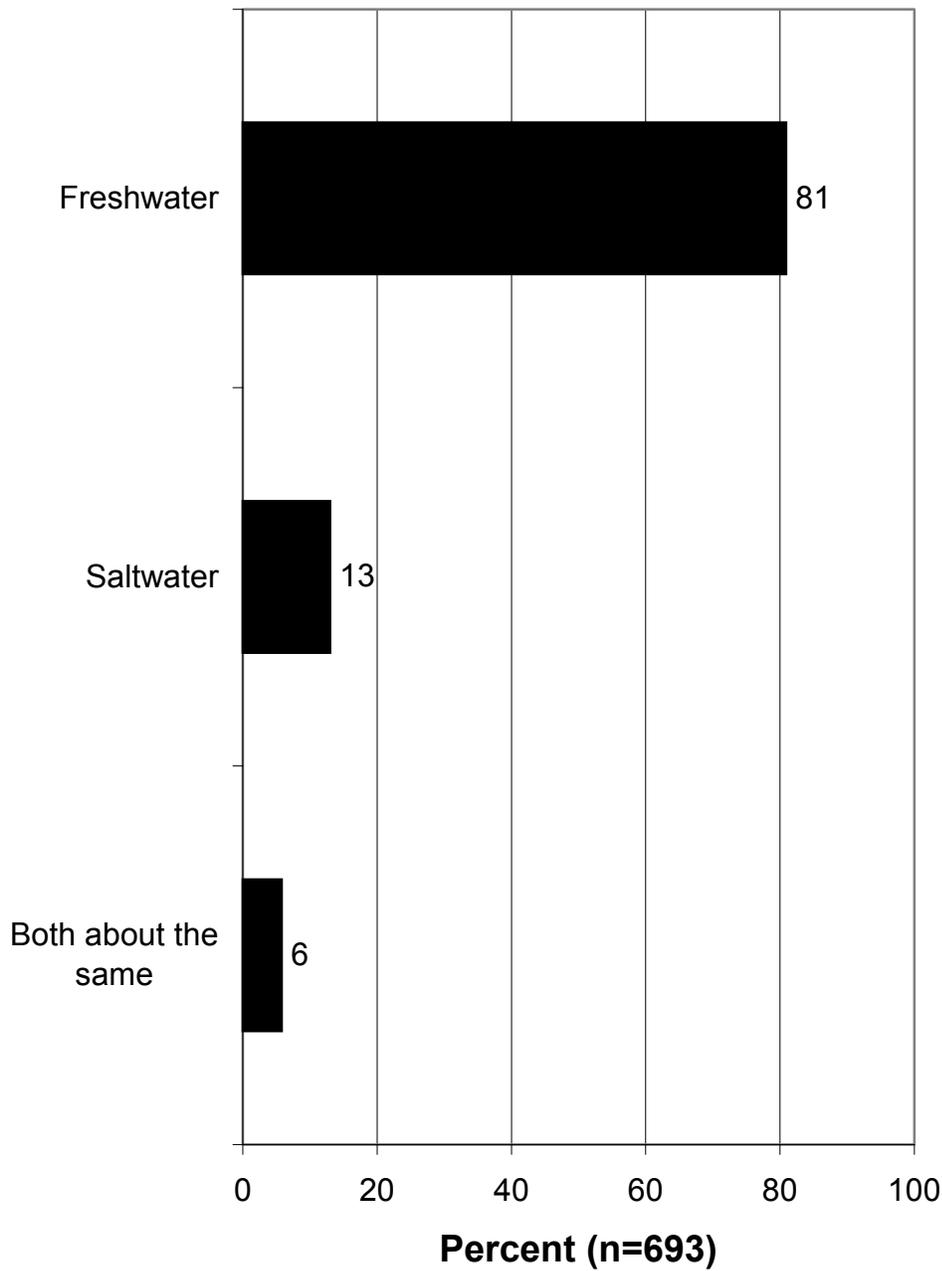
Q13. Within the past 12 months, did you go fishing in saltwater, such as at the beach or in the ocean? (asked of those who have fished in the last 12 months).



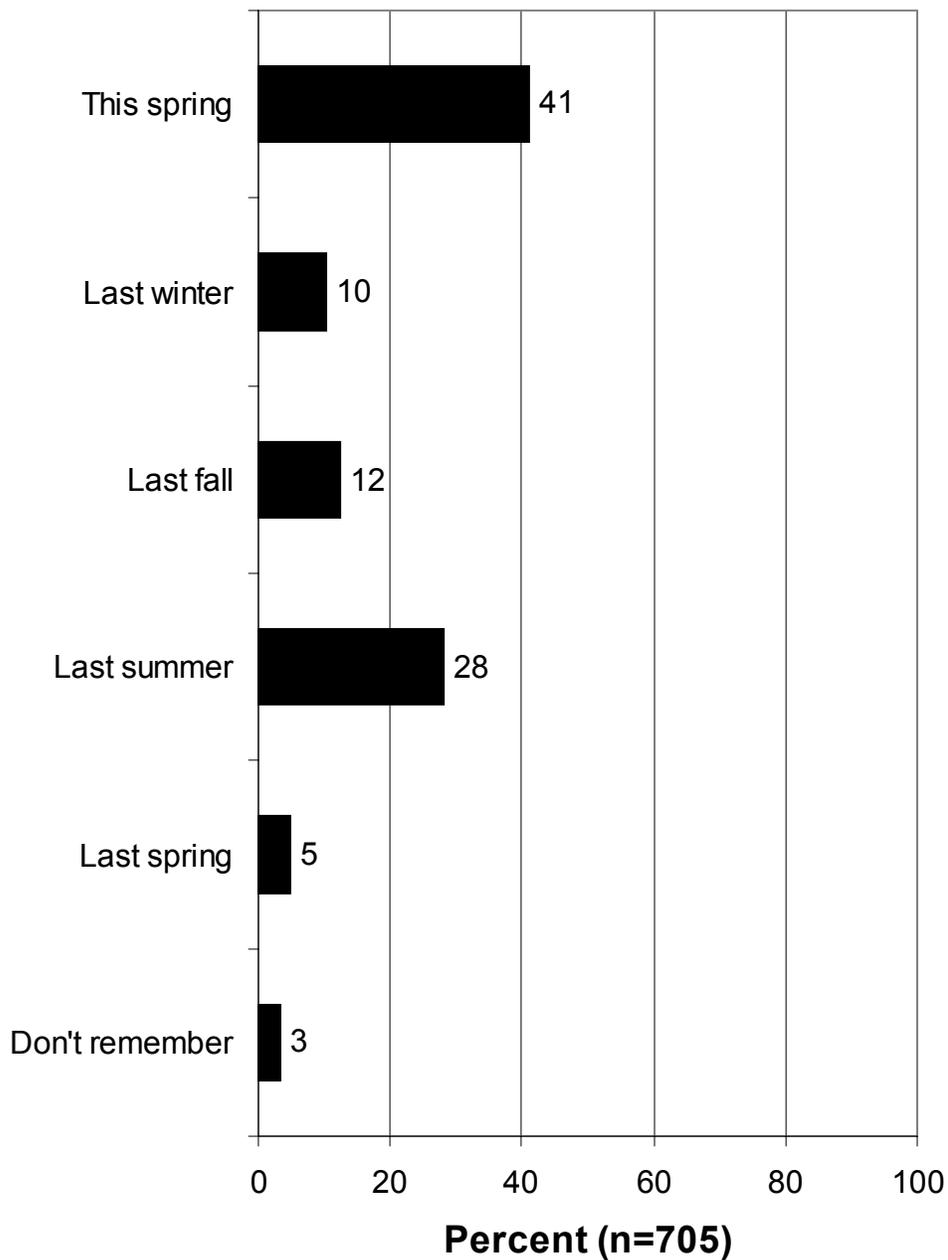
Q14. Which do you do more: Fish in freshwater or in saltwater, or do you do both about the same? (asked of all respondents)



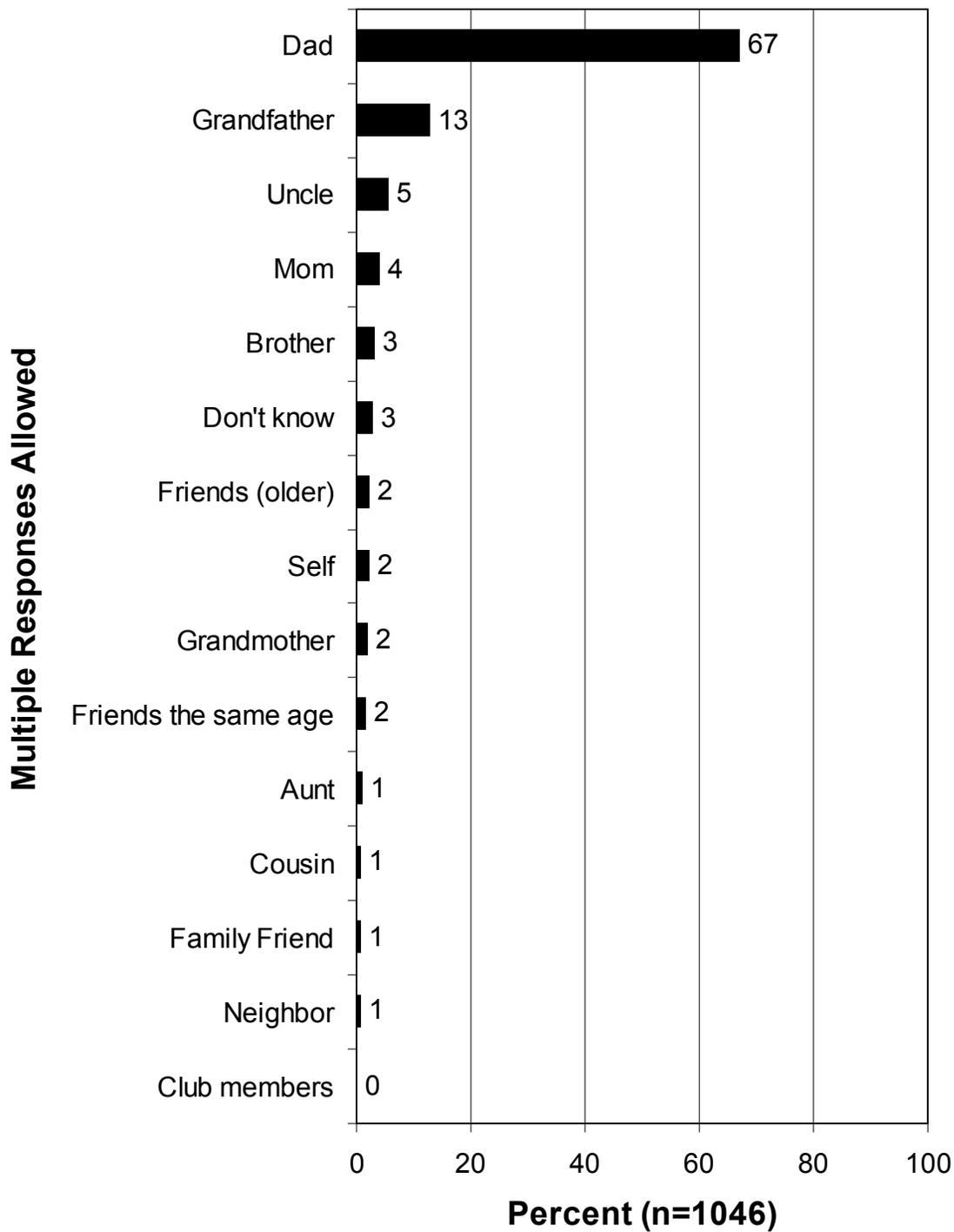
Q14. Which do you do more: Fish in freshwater or in saltwater, or do you do both about the same? (asked of those who either saltwater or freshwater fished in the last 12 months).



Q15. When was the last time you went fishing? Did you go this spring, this past winter, last fall, last summer or last spring? (asked of those who have fished in the last 12 months).

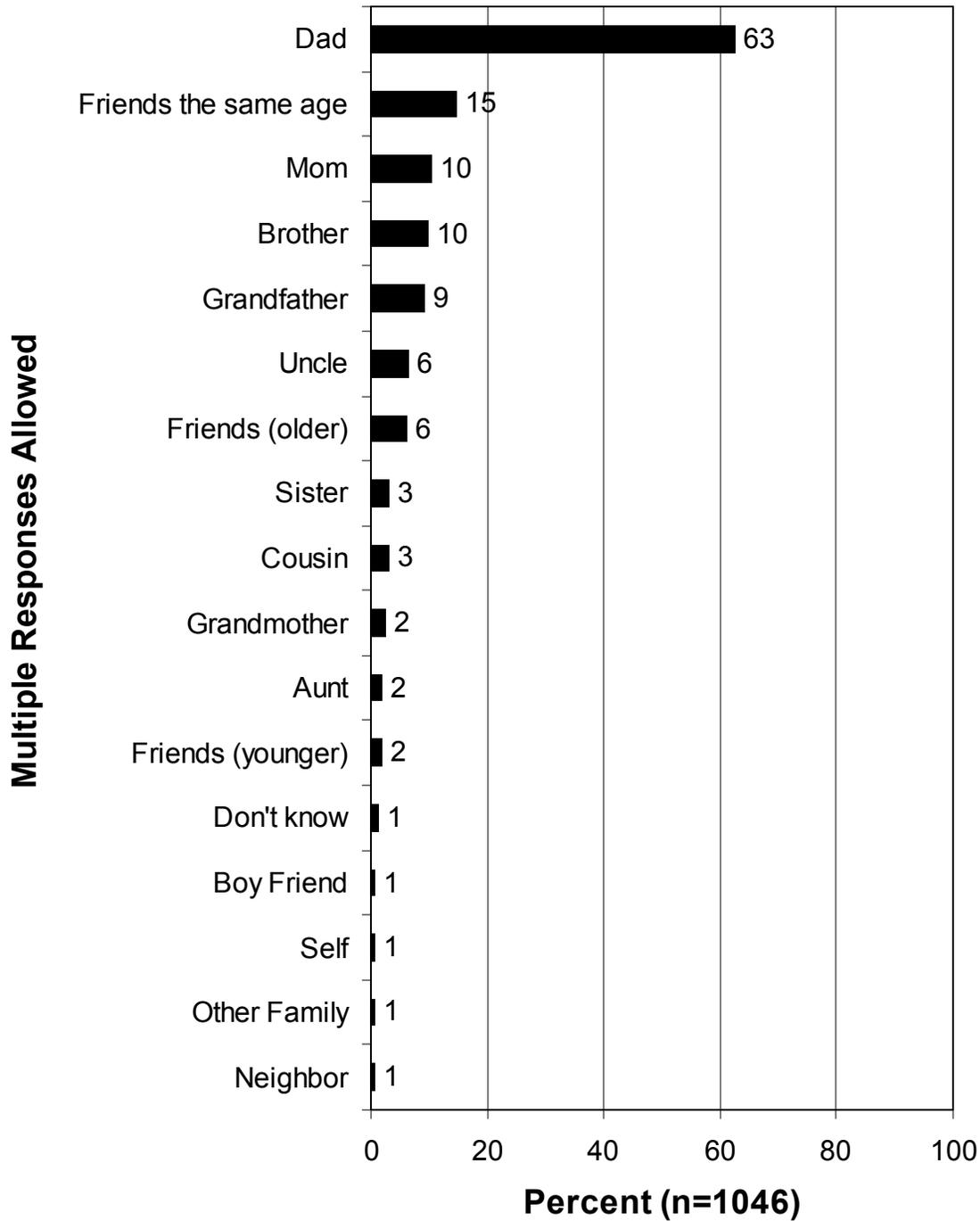


**Q18. Who FIRST taught you how to fish?
(asked of those who reported having
gone fishing in their life).**

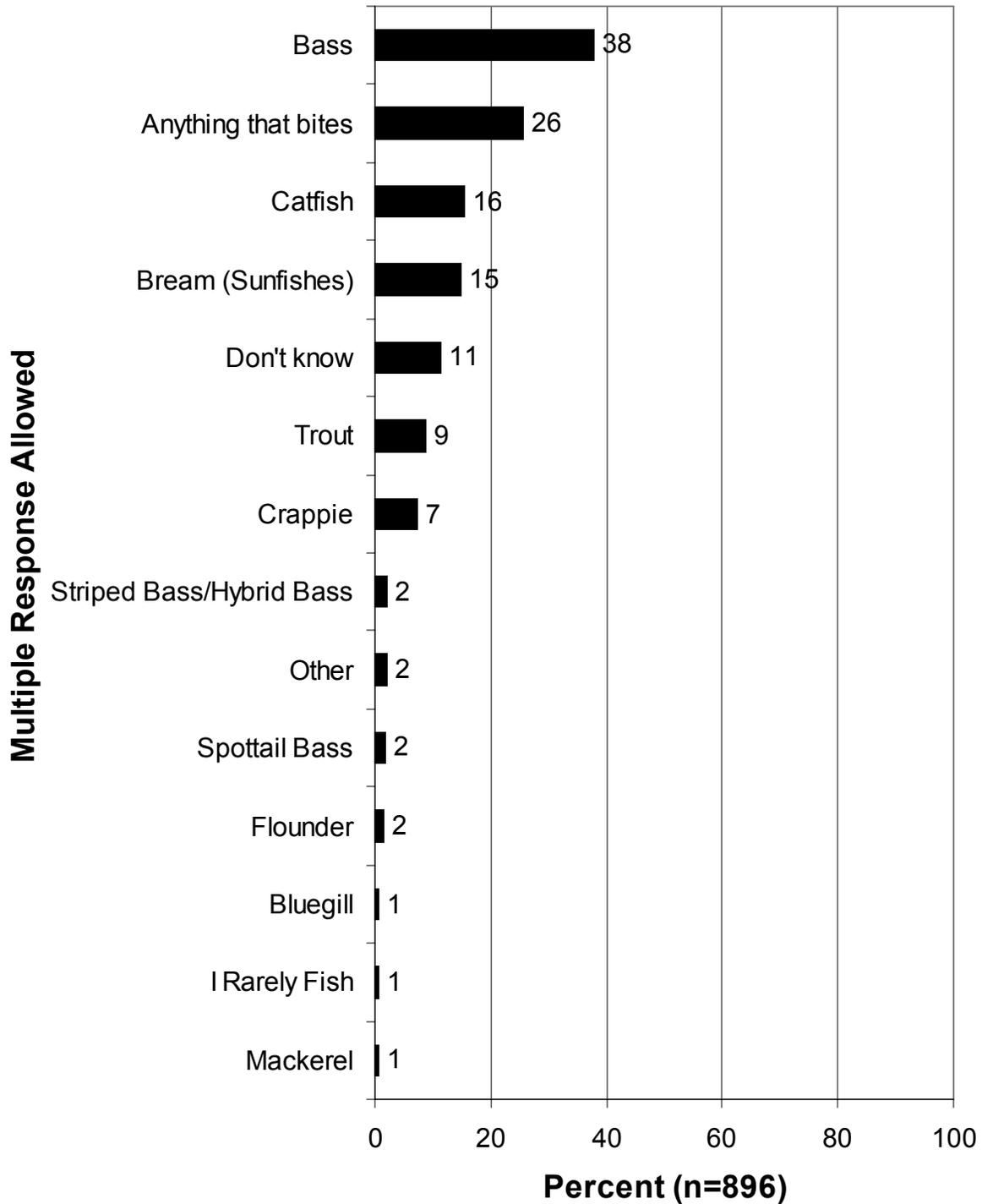


Q21. WHO do you usually go fishing with?

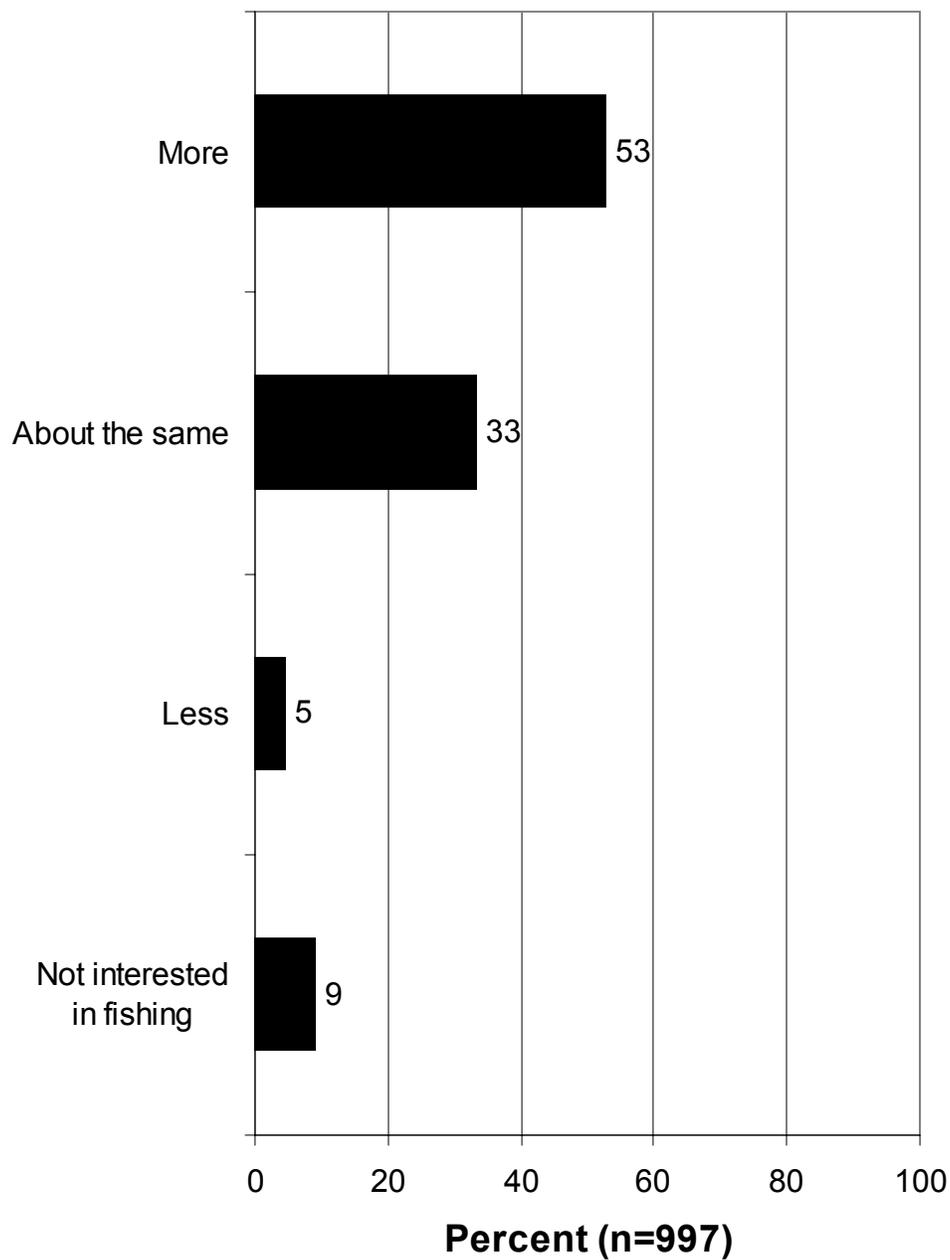
(asked of those who reported having gone fishing in their life).



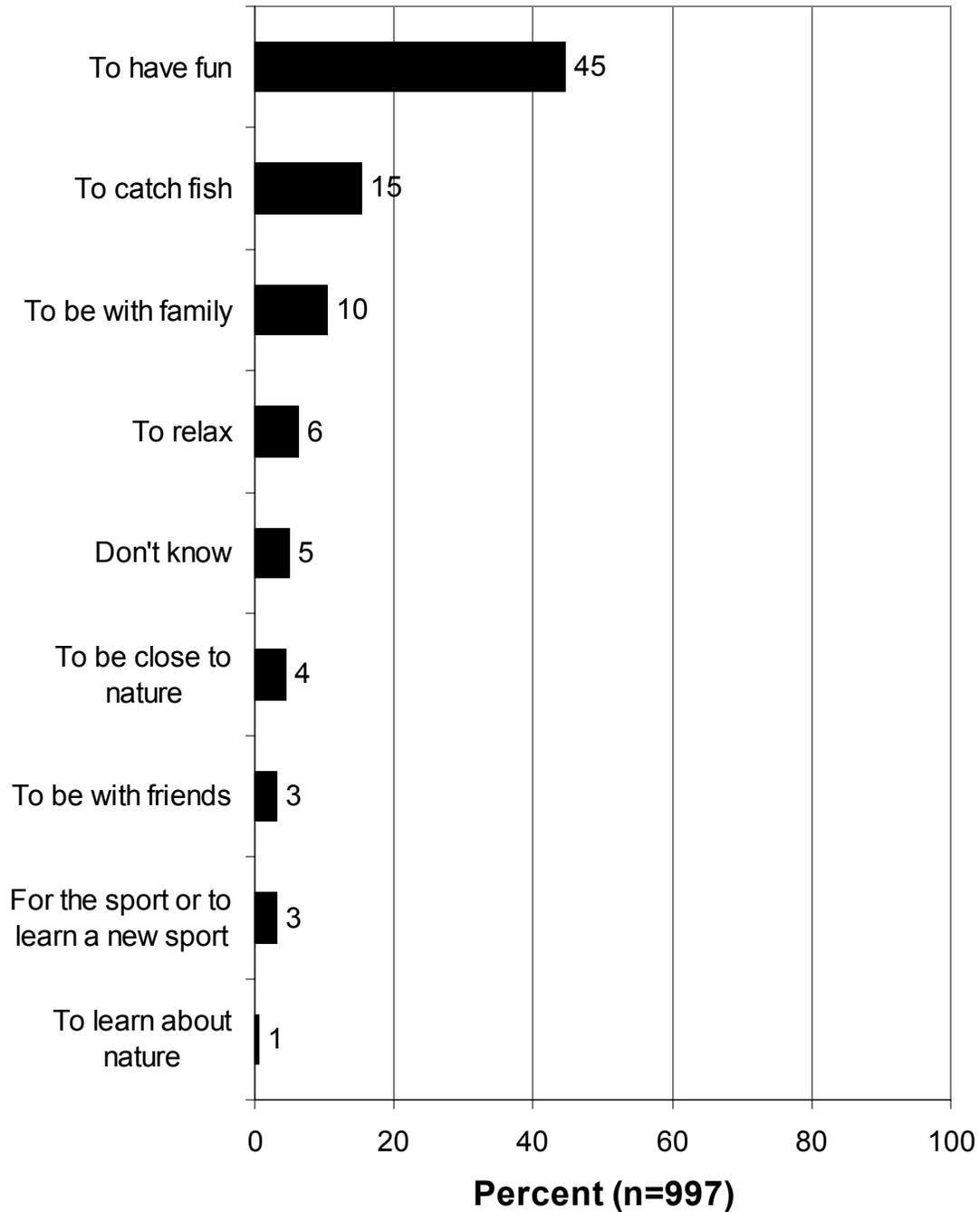
Q24. What kind of fish do you usually fish for? (asked of those who reported having gone fishing in their life).



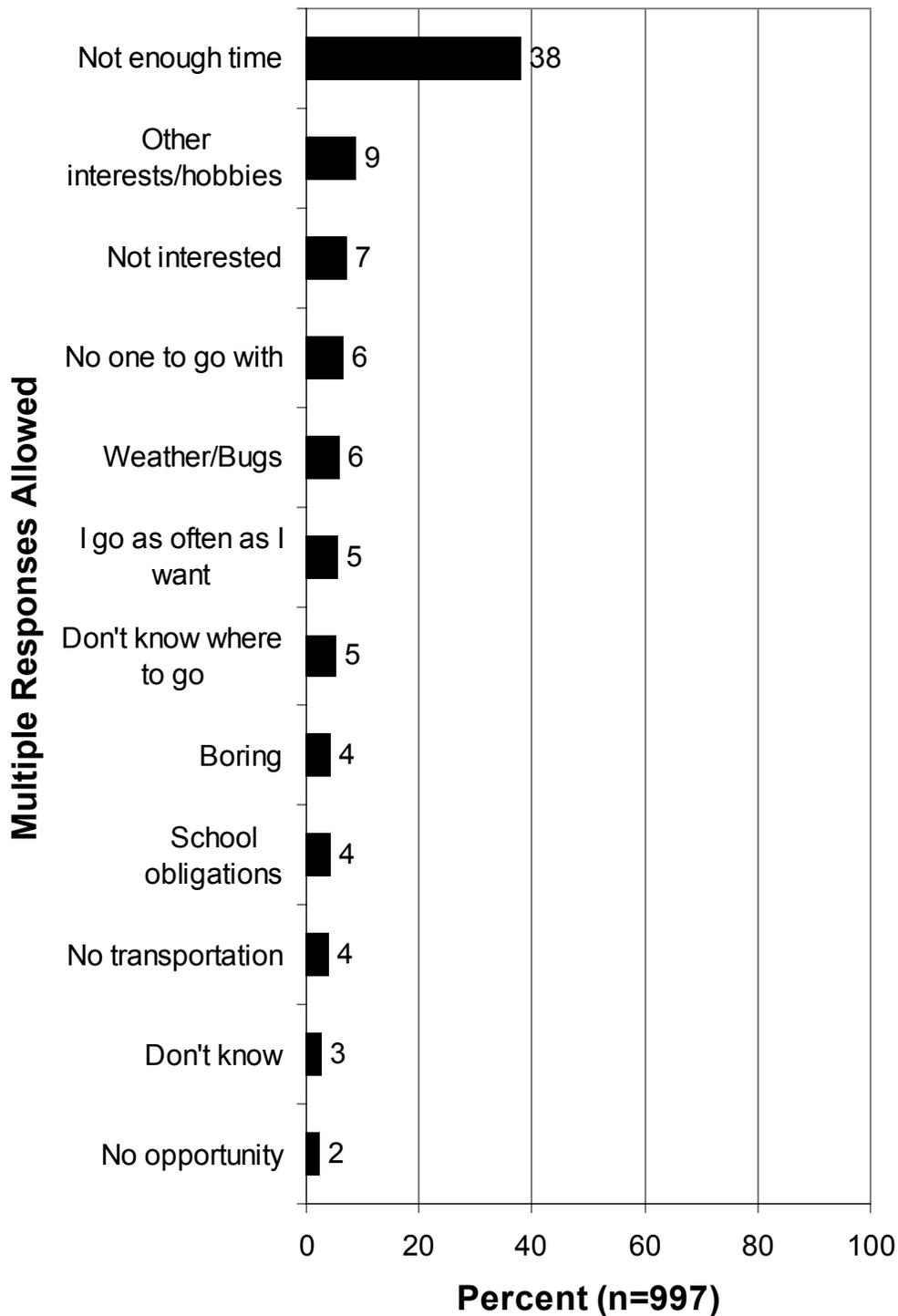
Q26. If you could change how much you go fishing, would you go fishing more, about the same, or less? Or are you not interested in going fishing? (Asked of all respondents)



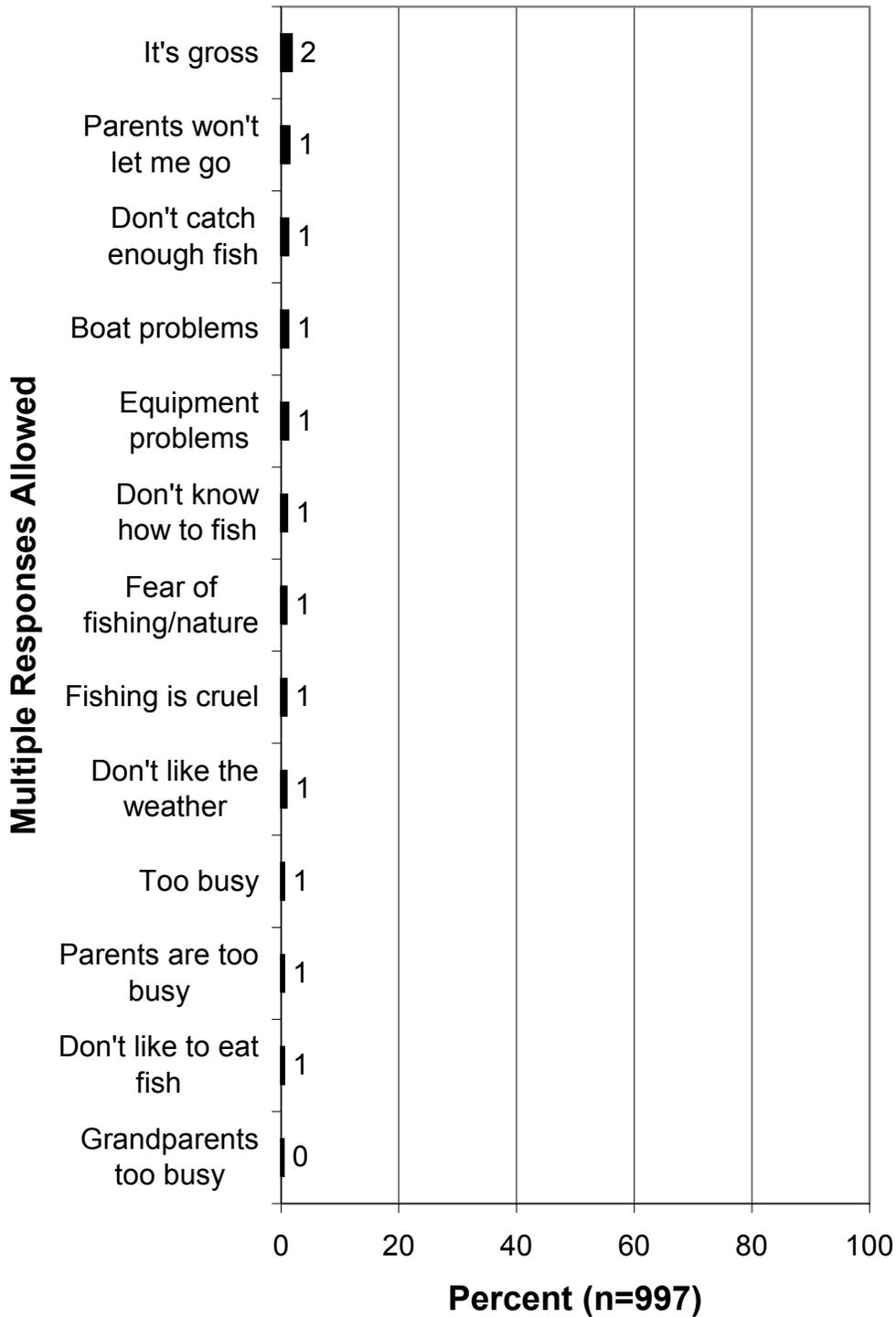
Q27. What is the main reason why you would go fishing? (unprompted: categories not read. respondent's single most important reason)



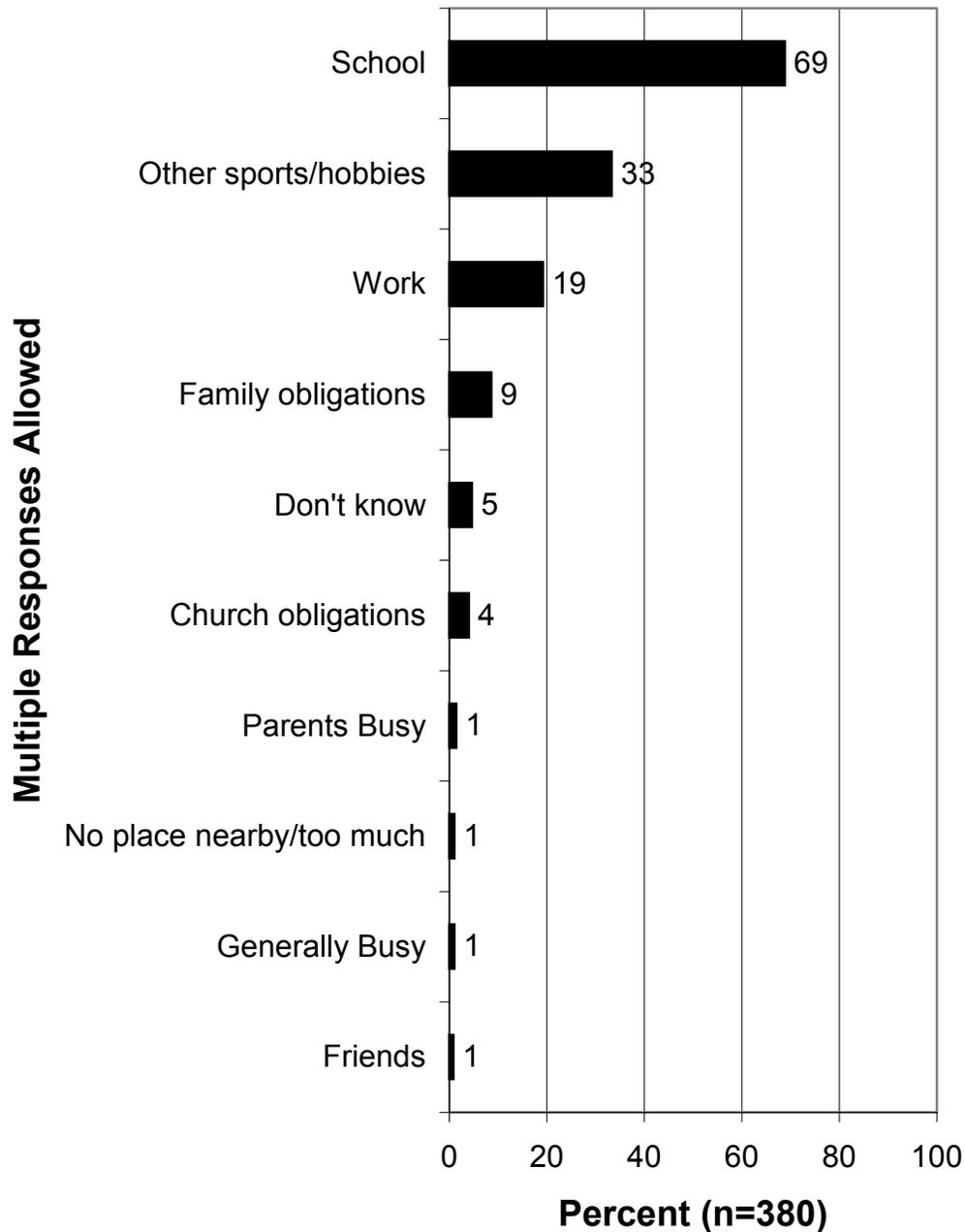
Q29. In general, what are some of the reasons why you don't go fishing more often?



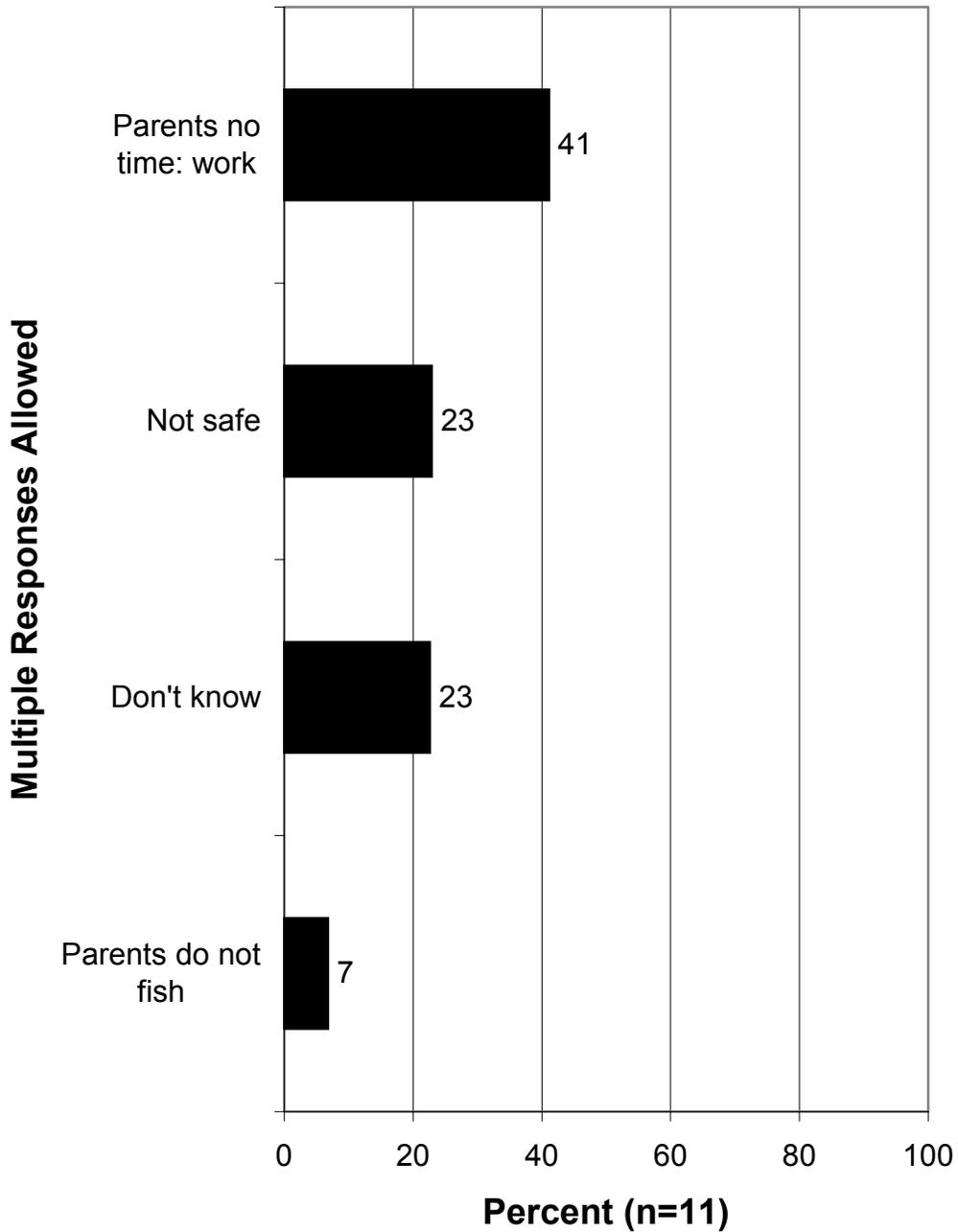
Q29. Cont'd. In general, what are some of the reasons why you don't go fishing more often?



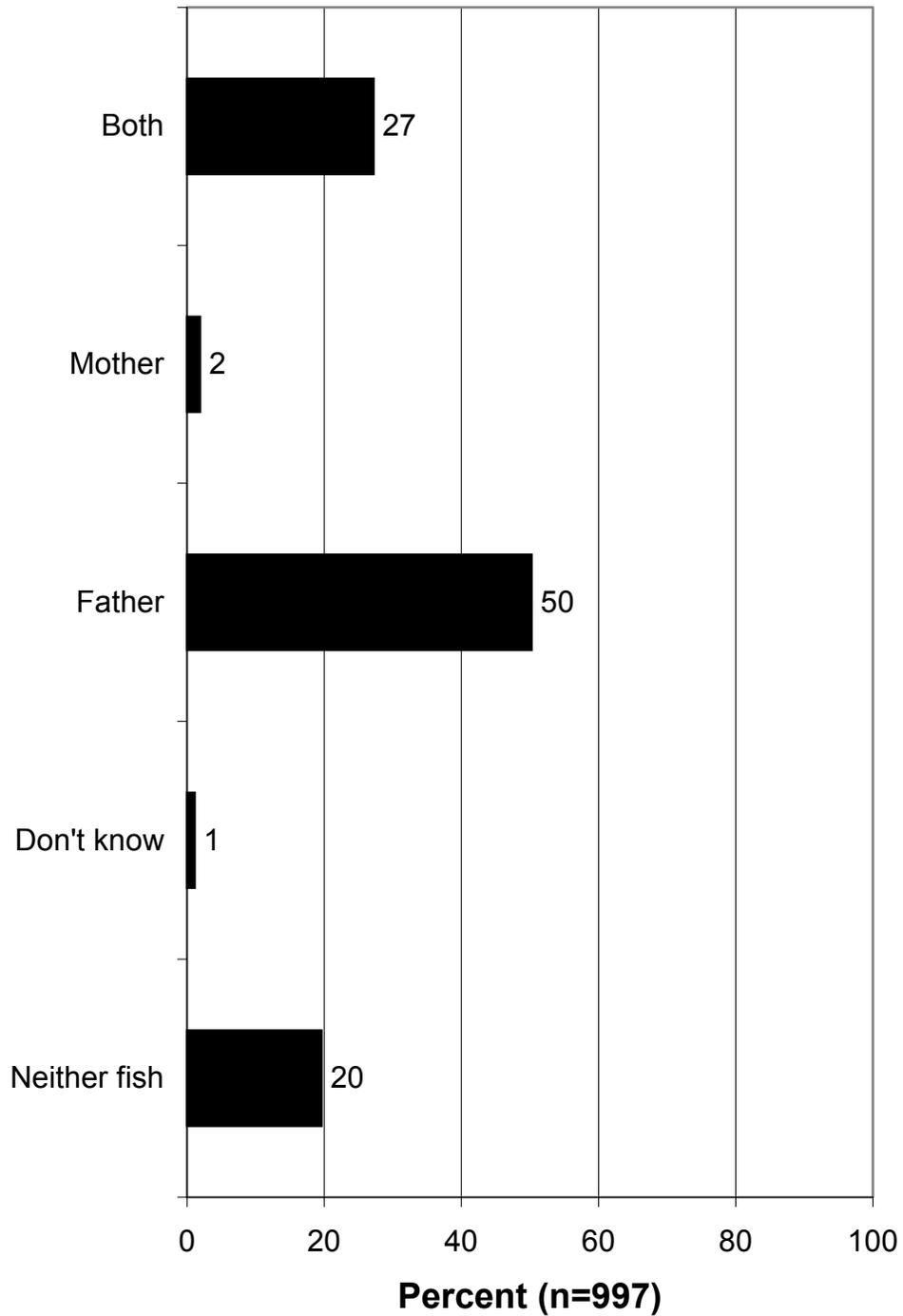
**Q32. What are the specific reasons you don't have enough time to go fishing?
(asked of those who reported "not enough time" as a reason they do not go fishing).**



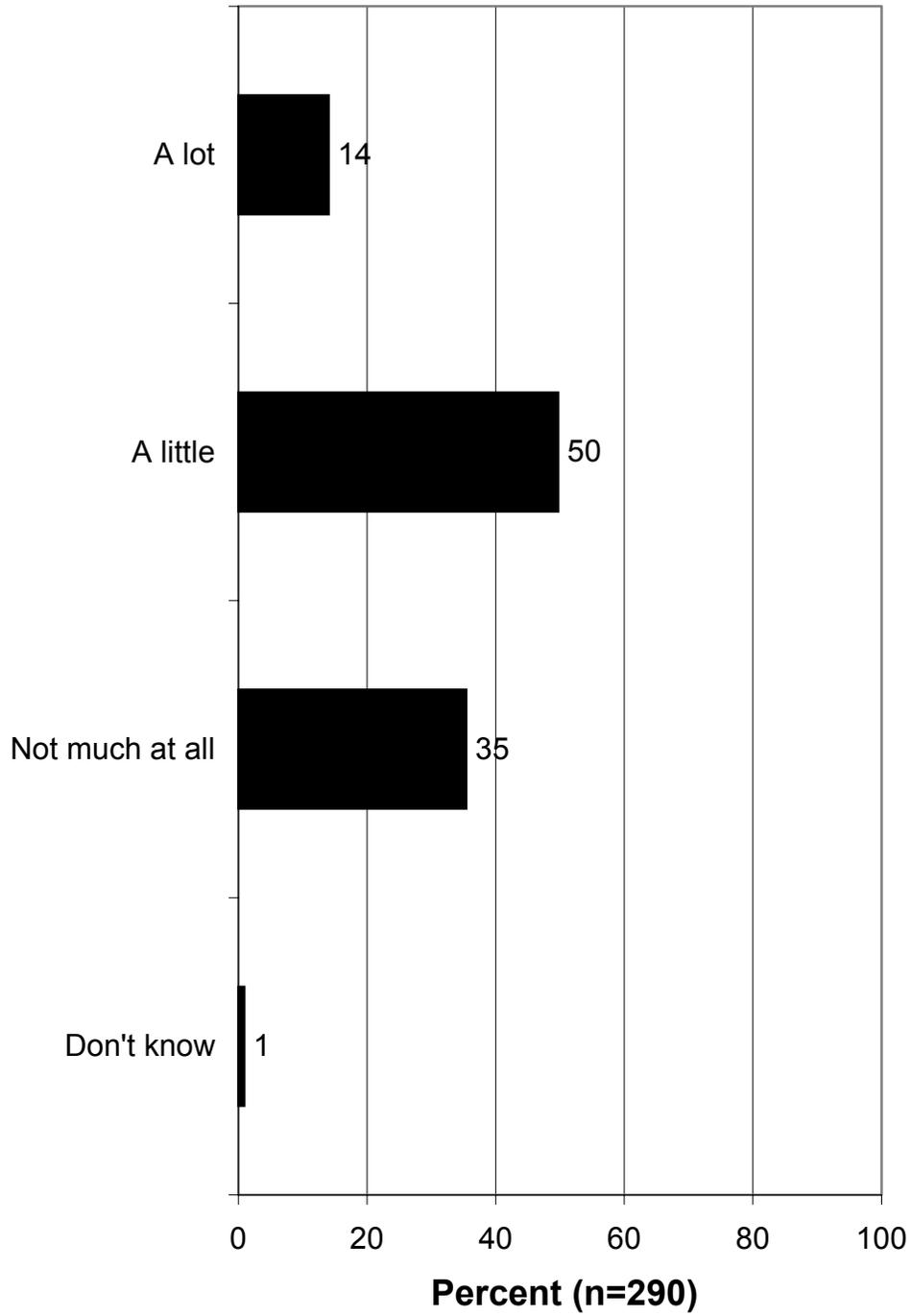
Q35. You said your parents would not let you go fishing? What, specifically, are the reasons for this? (asked of those who's "parents will not let them go" fishing).



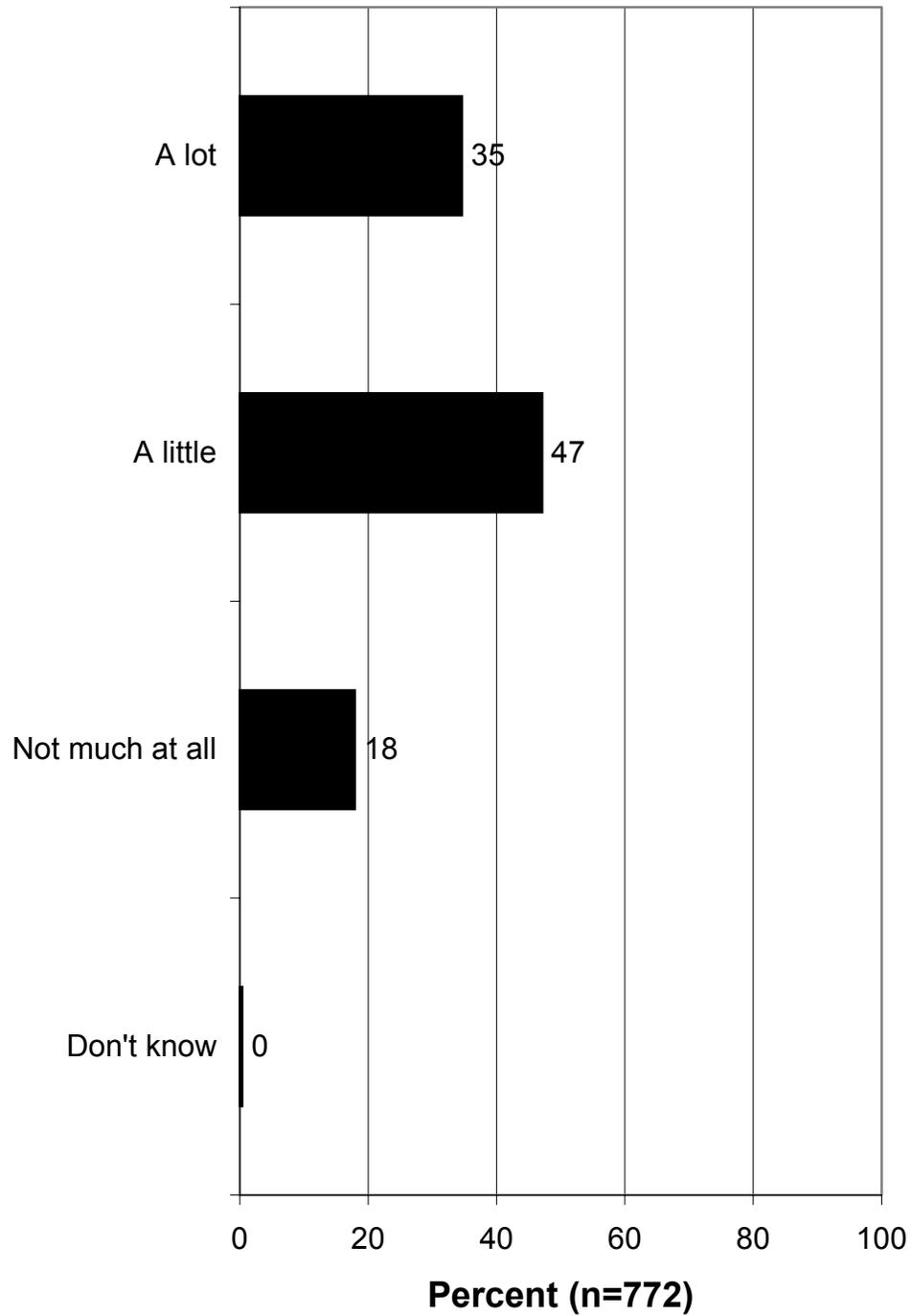
Q37. Do both of your parents fish, or does only your mother or your father fish?



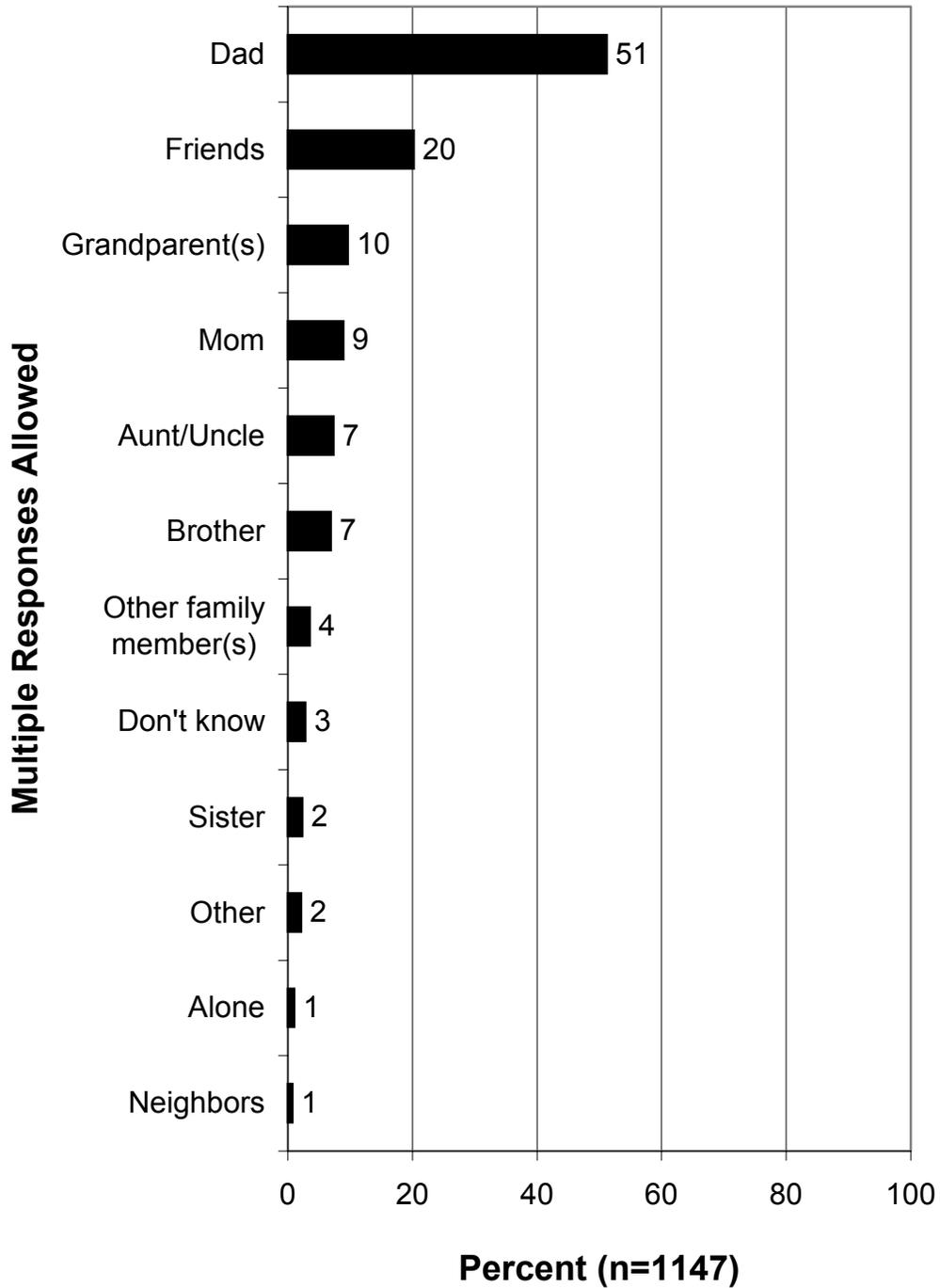
Q38. Does your mom fish a lot, a little, or not much at all? (asked of those whose mother fishes).



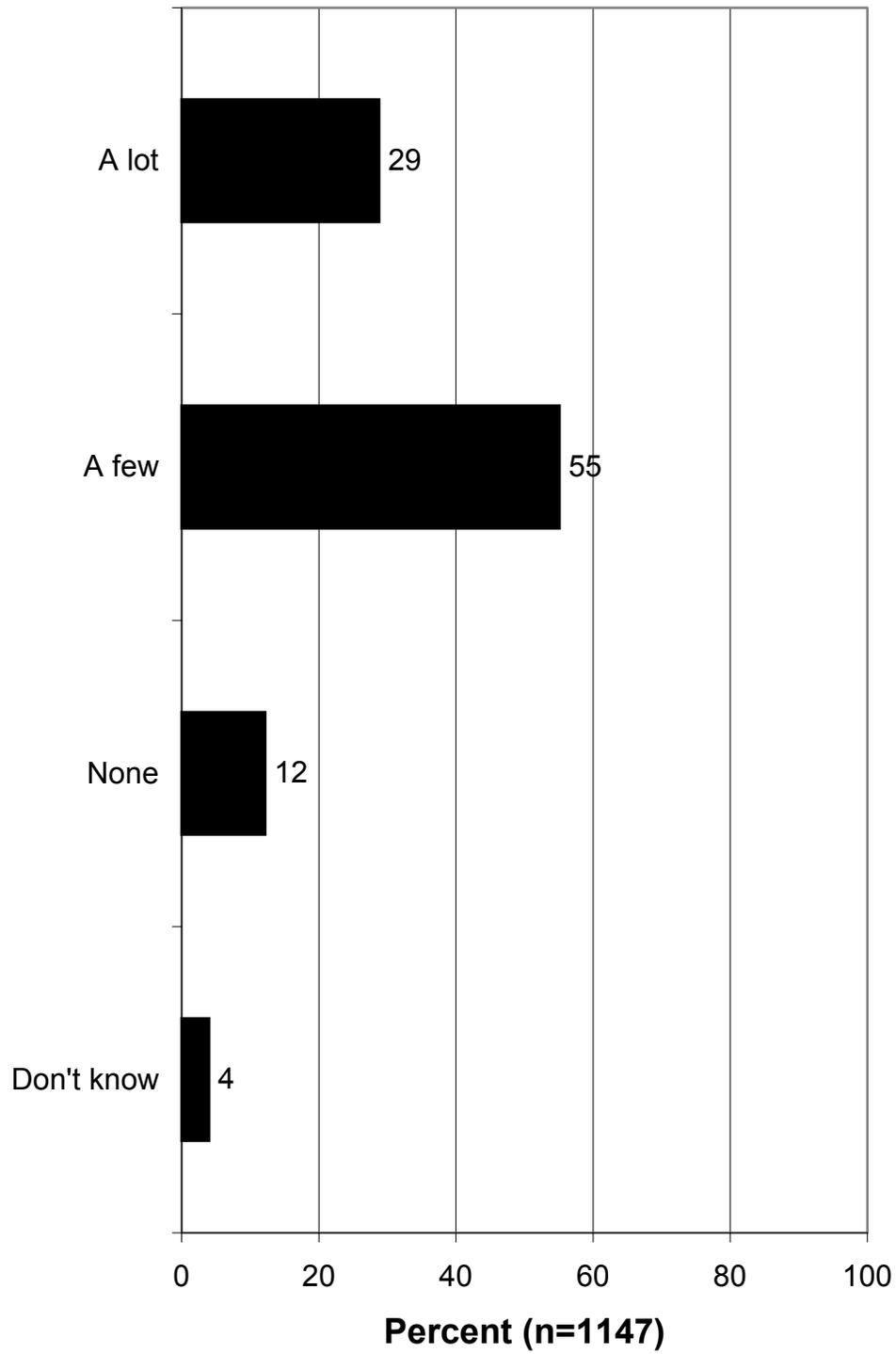
Q39. Does your dad fish a lot, a little, or not much at all? (asked of those whose dad fishes).



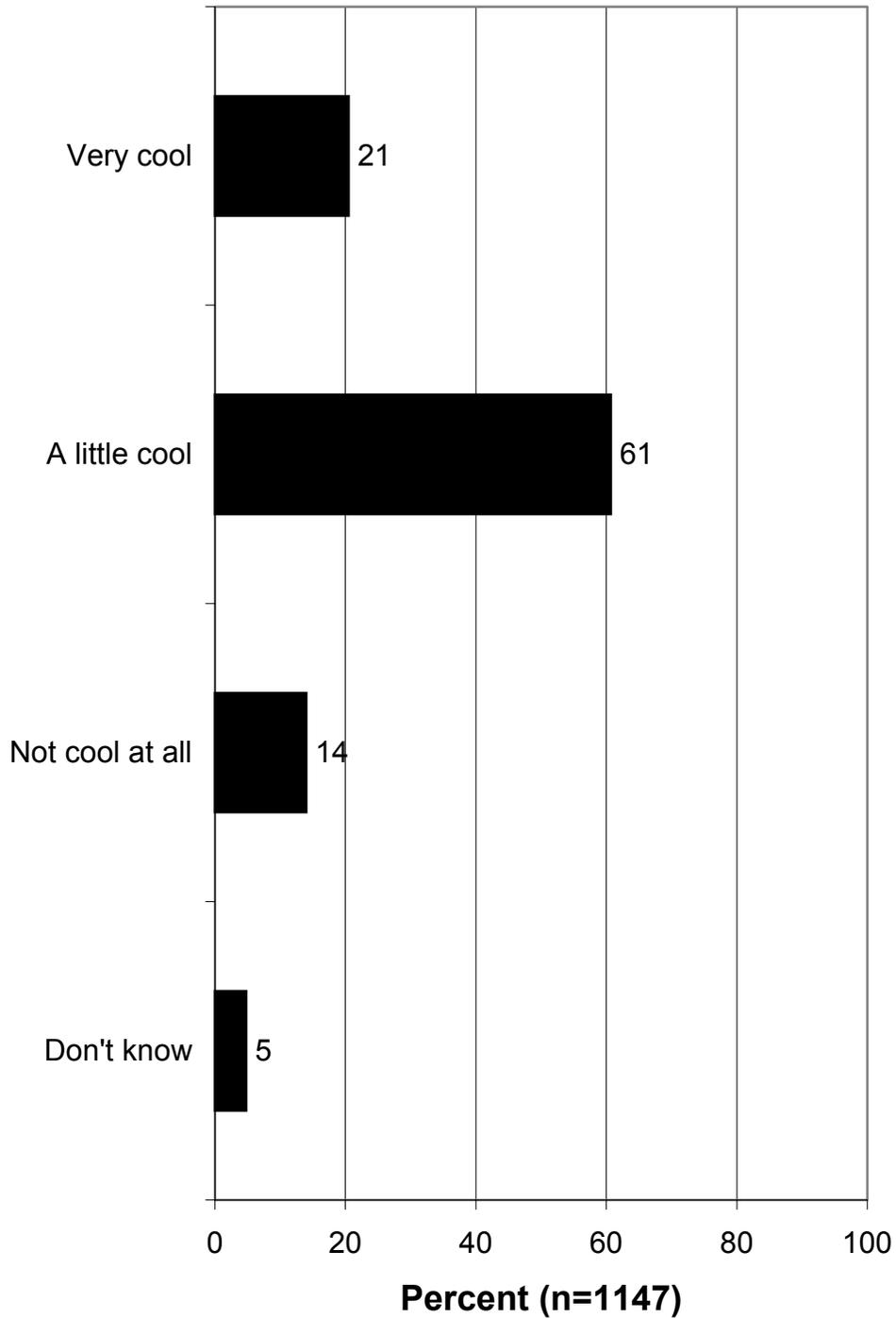
Q41. Considering everyone you could go fishing with, who would you most like to go fishing with?



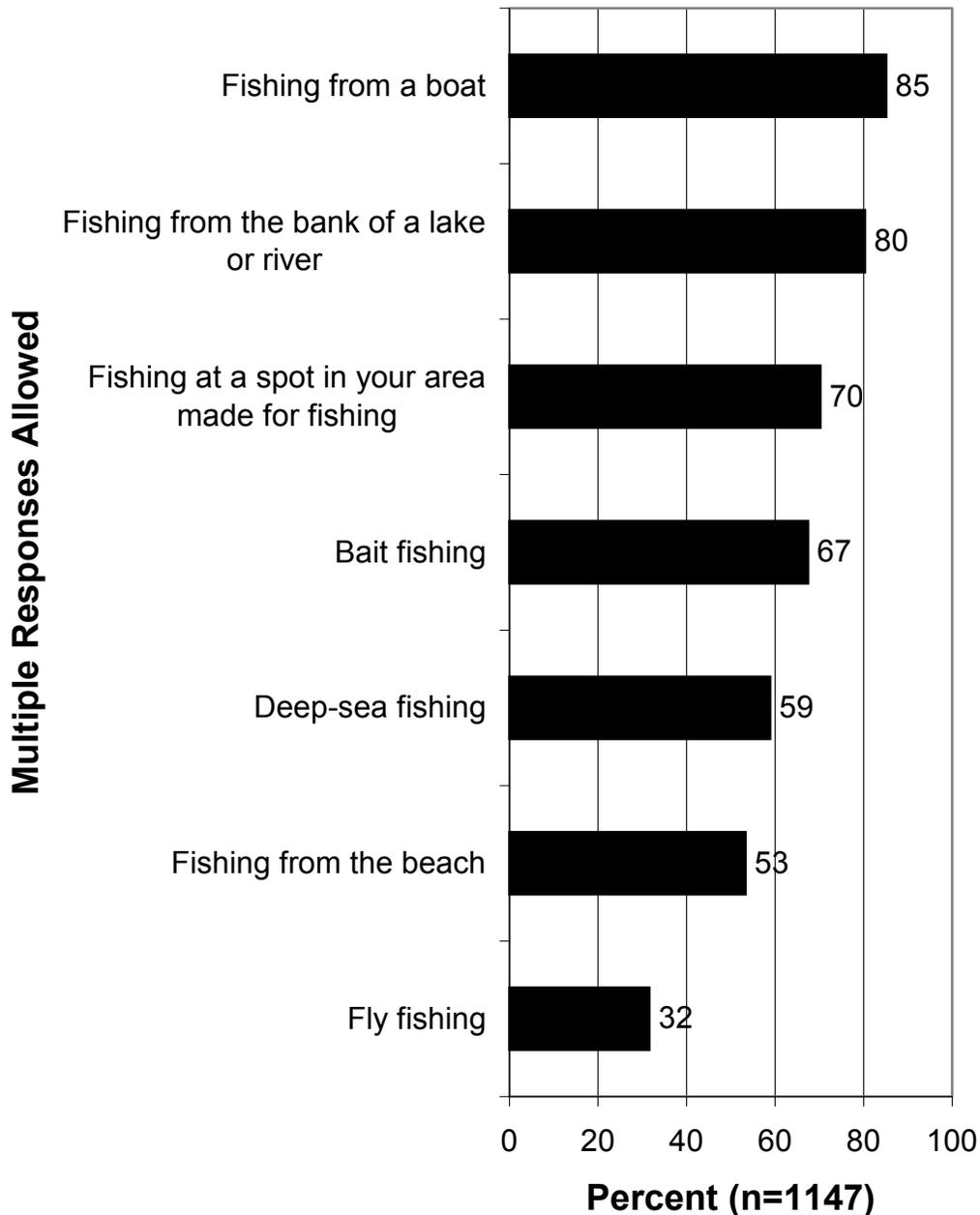
Q43. Would you say that a lot, a few, or none of your friends fish?



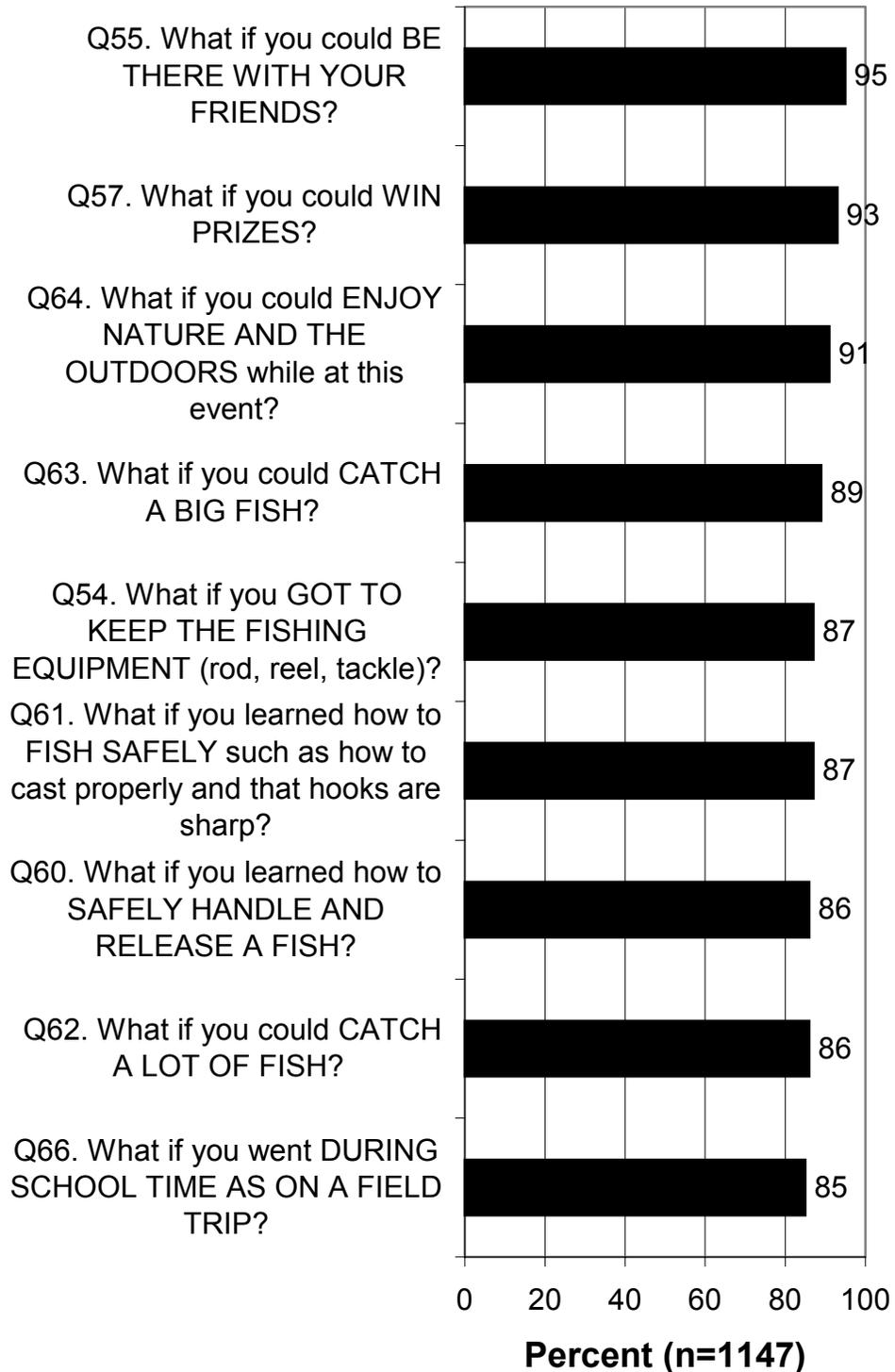
Q44. How cool do you think kids your age think fishing is? Is it very cool, a little cool, or not cool at all?



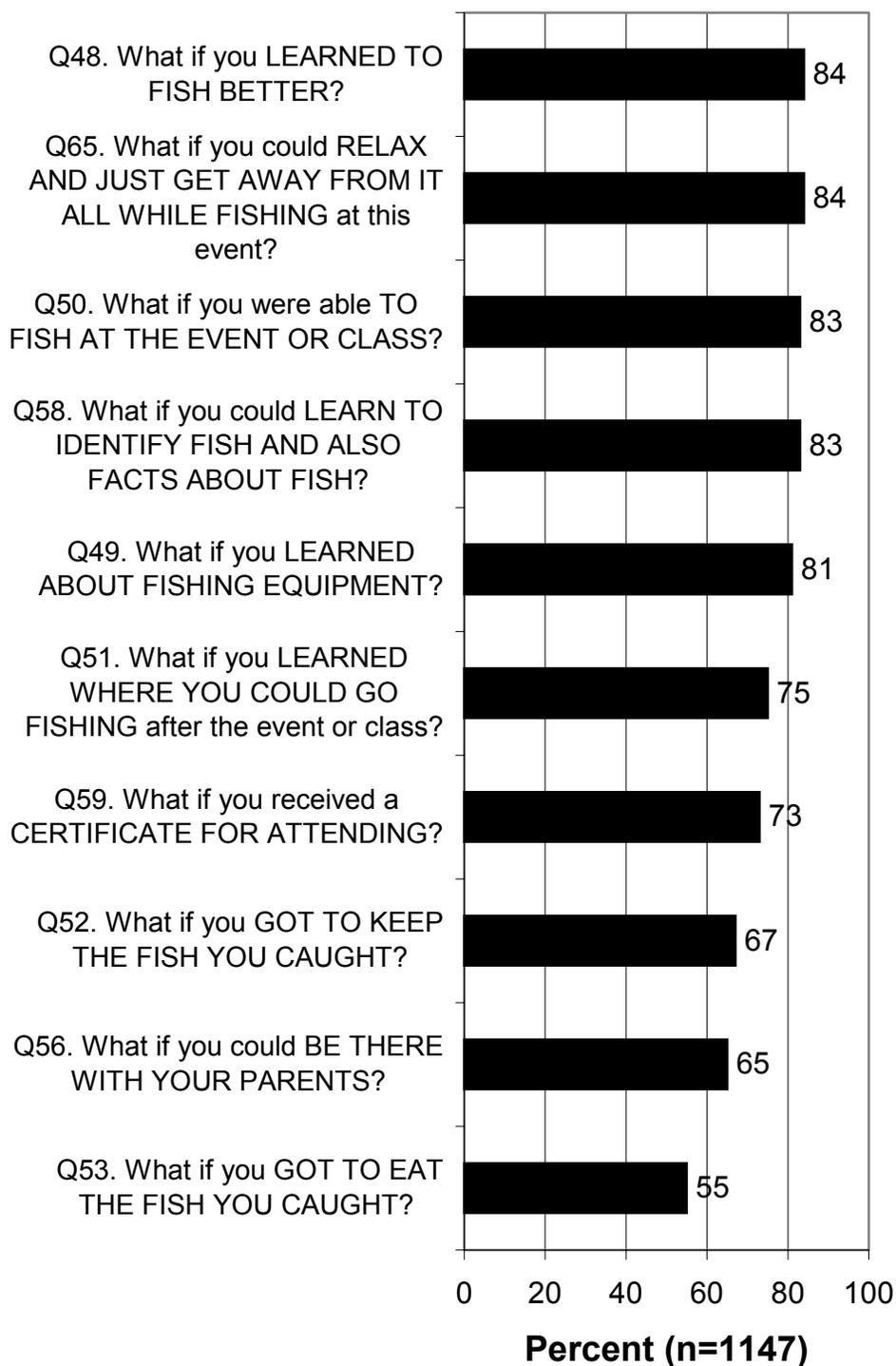
Q46. Now, I am going to read you a list of different types of fishing and I would like to know if you are interested in participating in any of these activities. Are you interested in...?



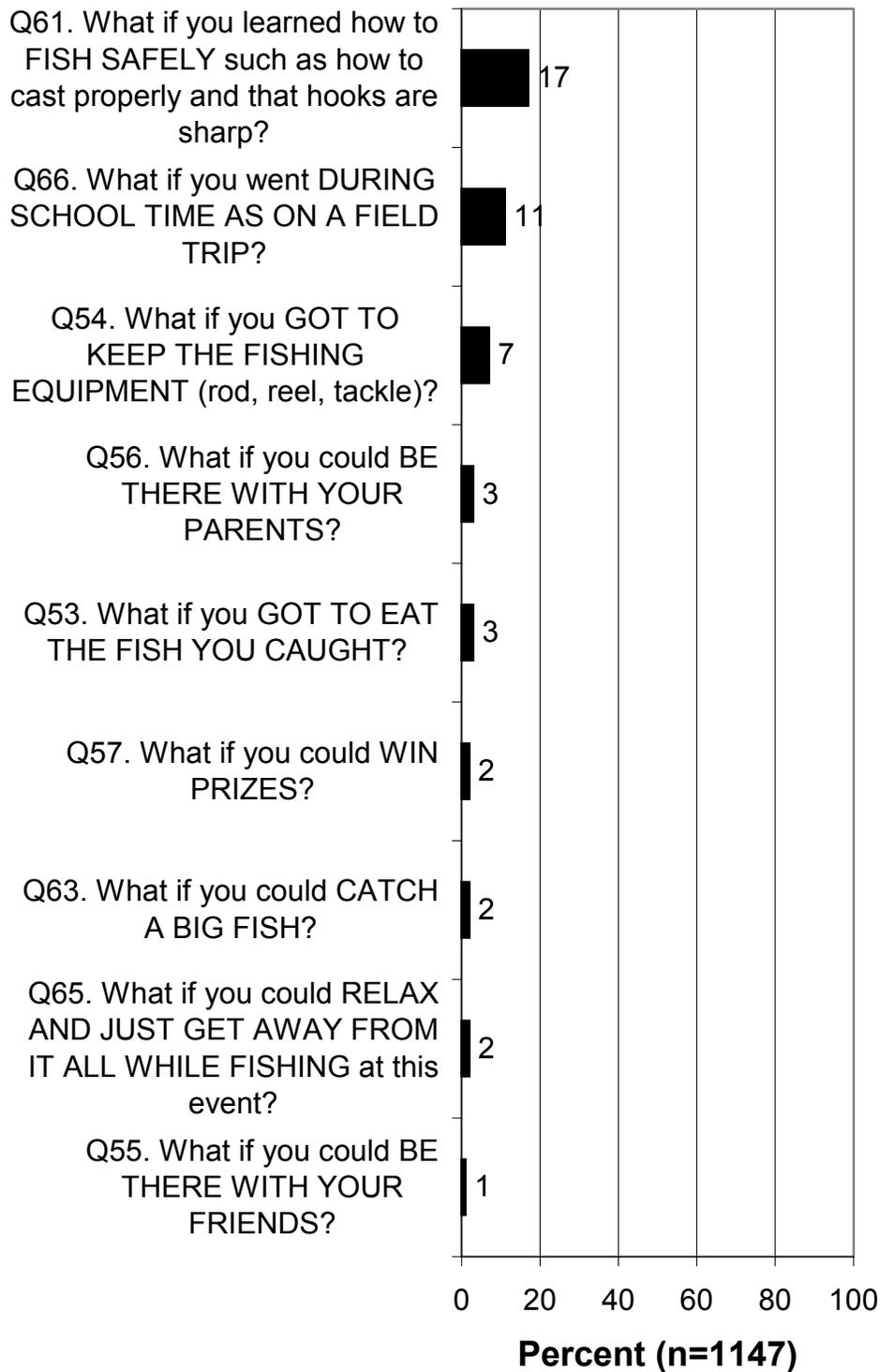
Q48-66. Would the following make the fishing event or class BETTER.



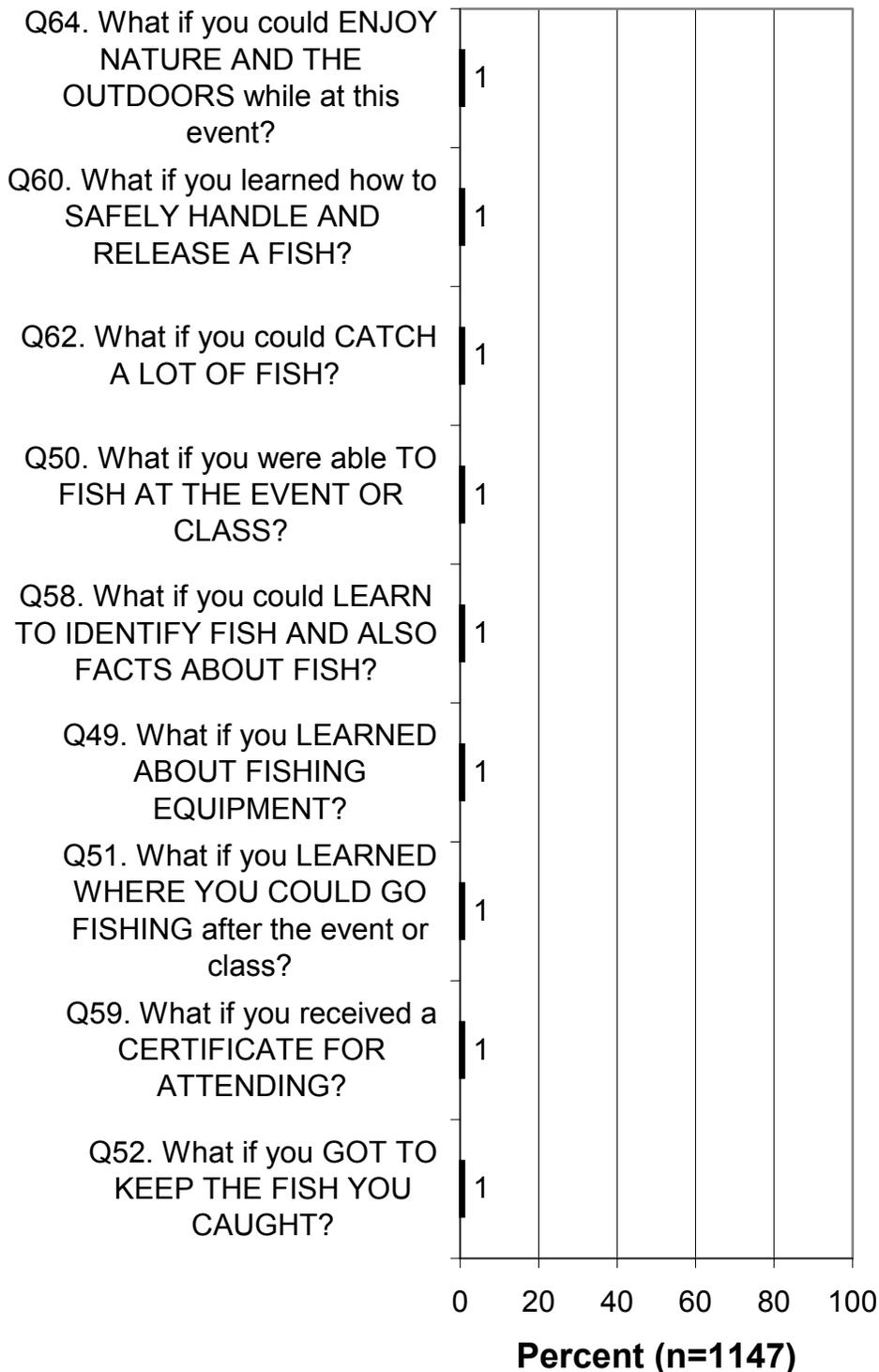
Q48-66. Cont'd. Would the following make the fishing event or class BETTER.



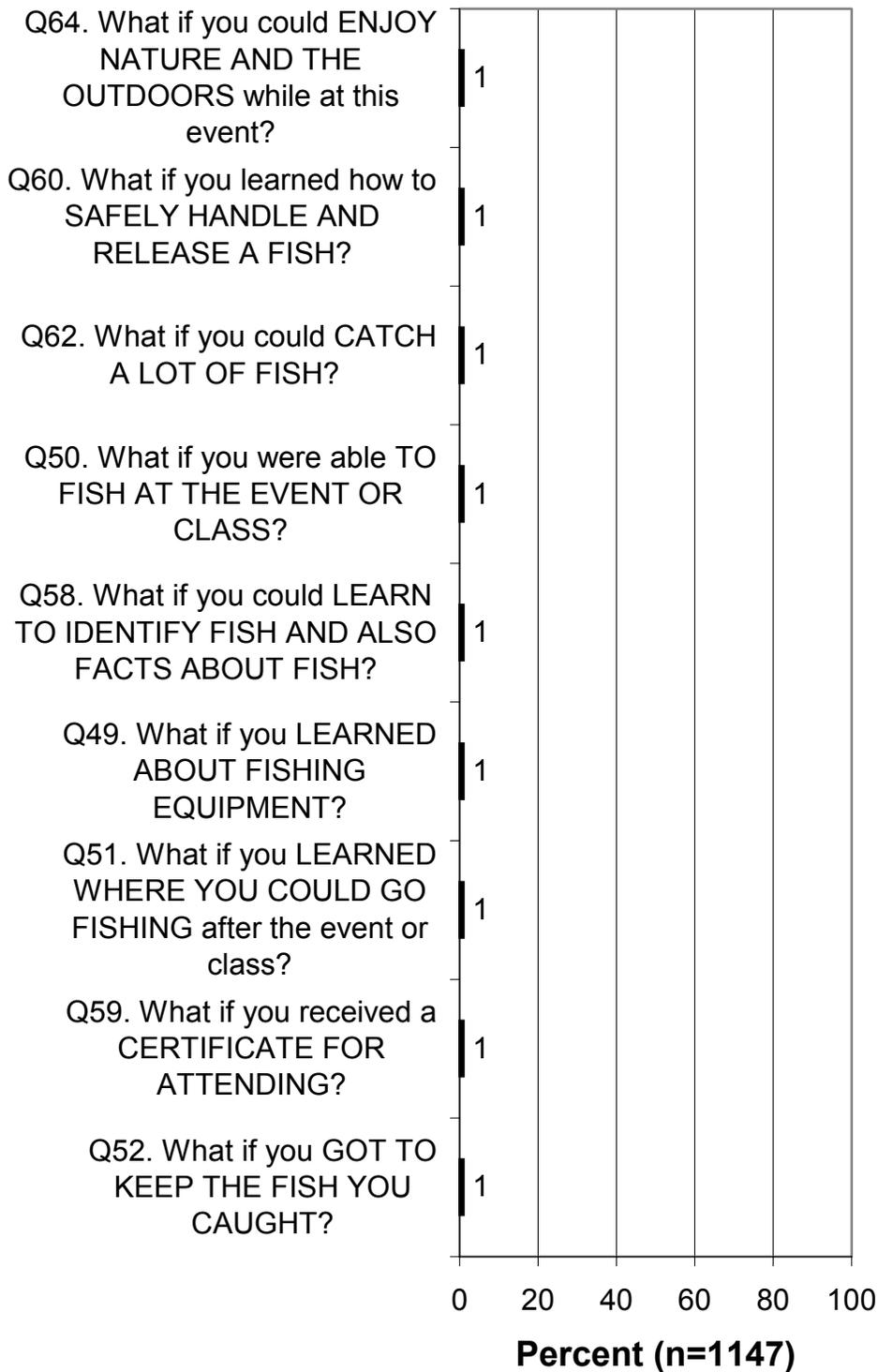
Q48-66. Would the following make the fishing event or class **WORSE**.



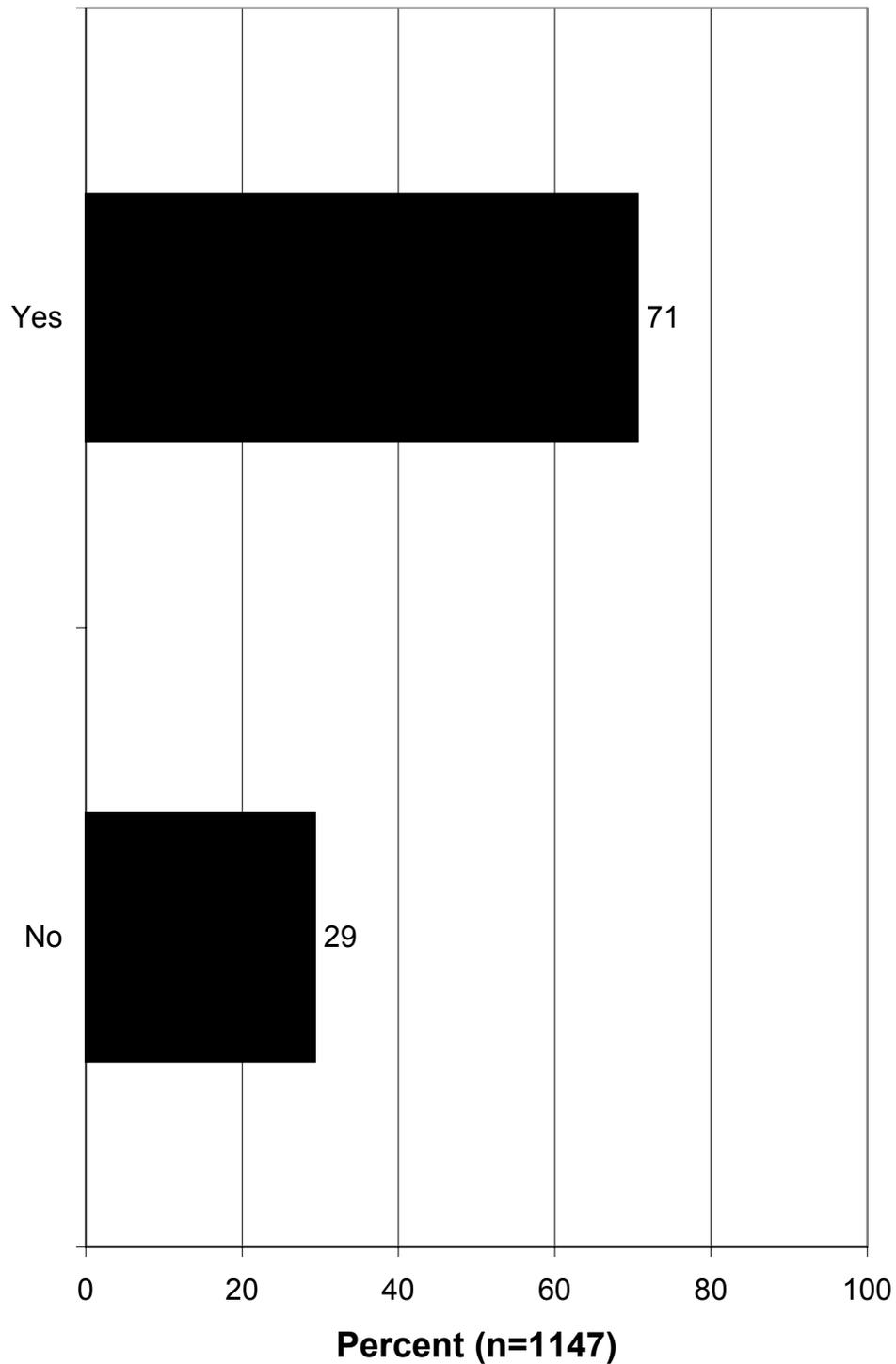
Q48-66. Cont'd. Would the following make the fishing event or class **WORSE**.



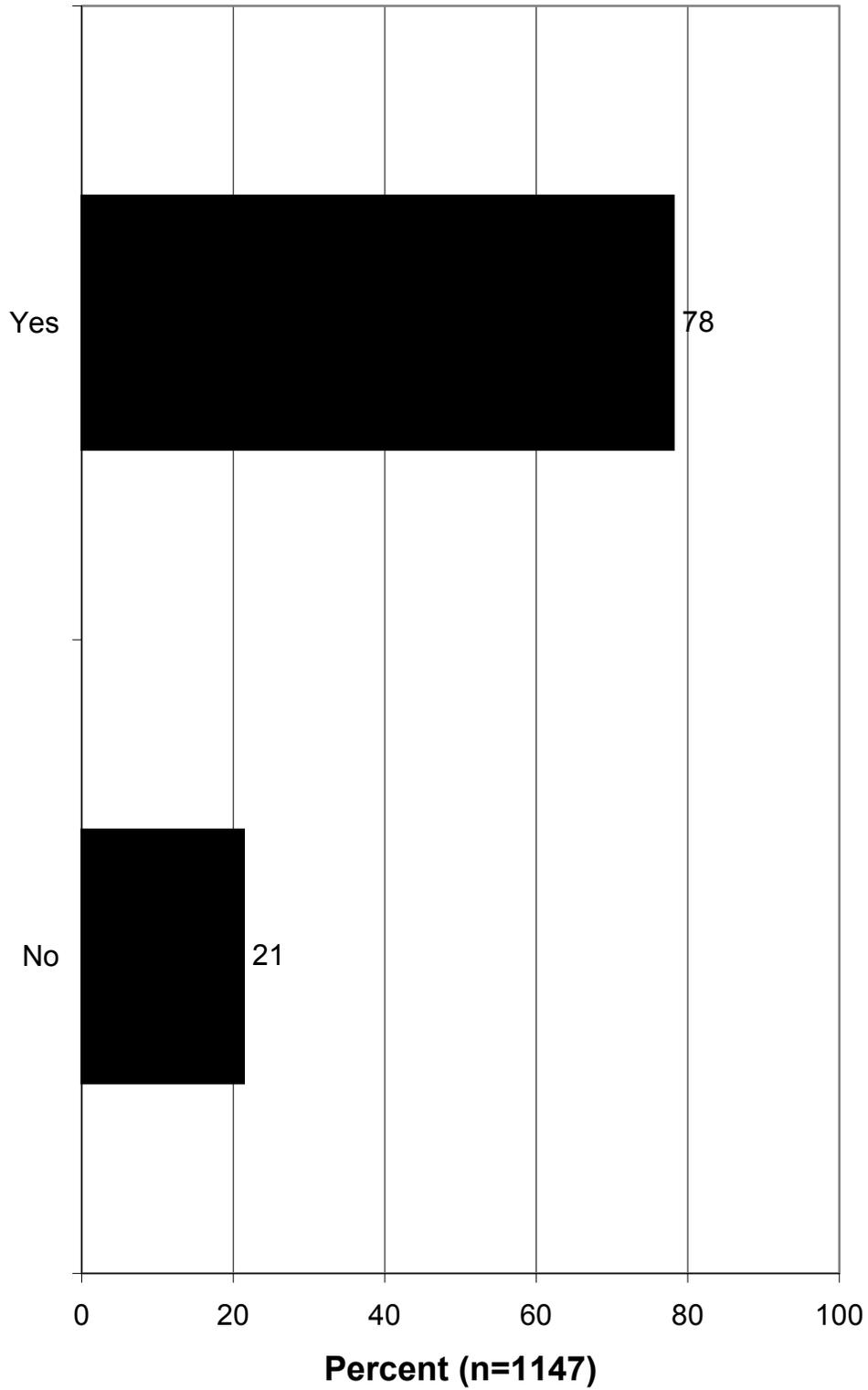
Q48-66. Cont'd. Would the following make the fishing event or class **WORSE**.



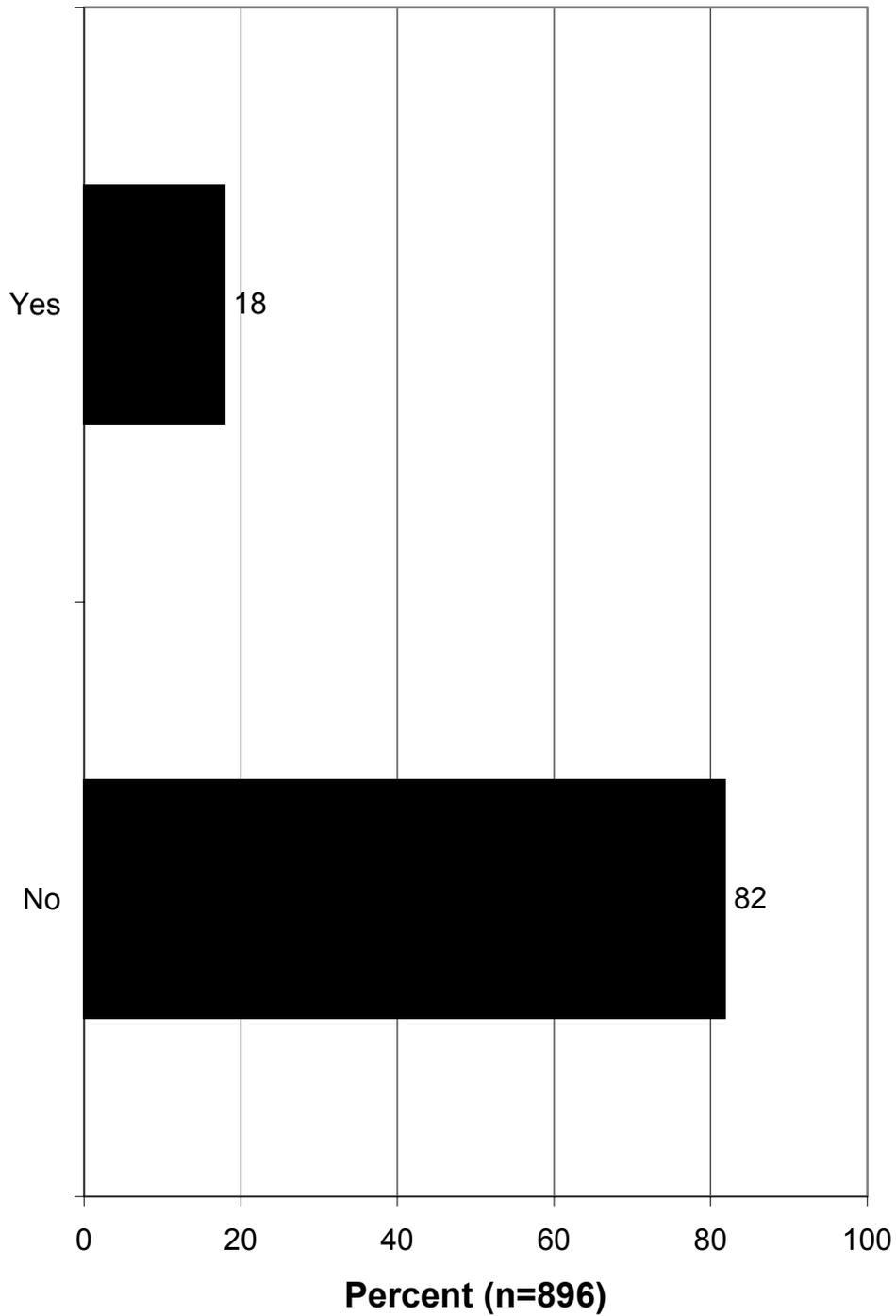
Q67. Have you ever played a computer fishing game or hand held fishing game?



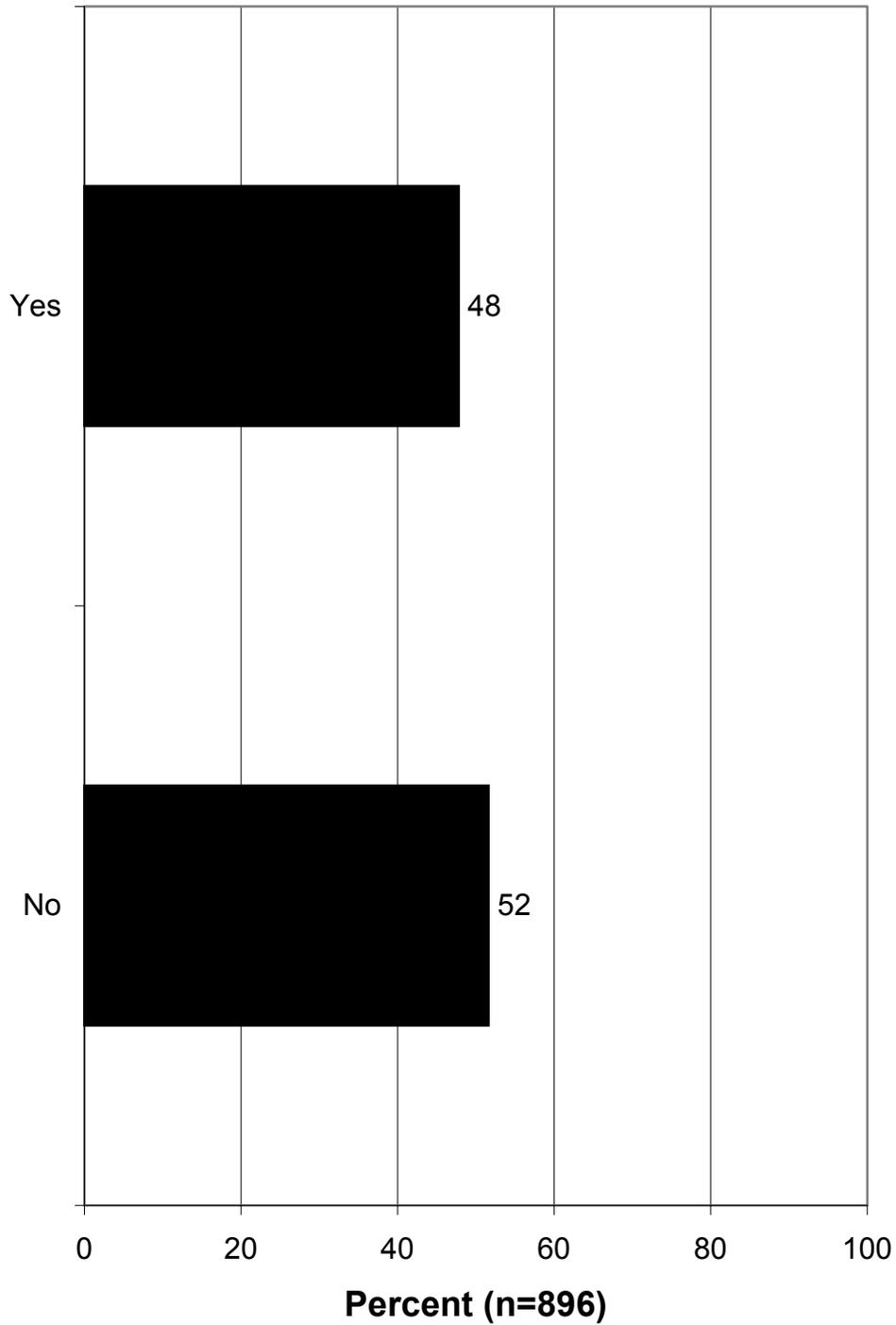
Q68. Do you use the Internet?



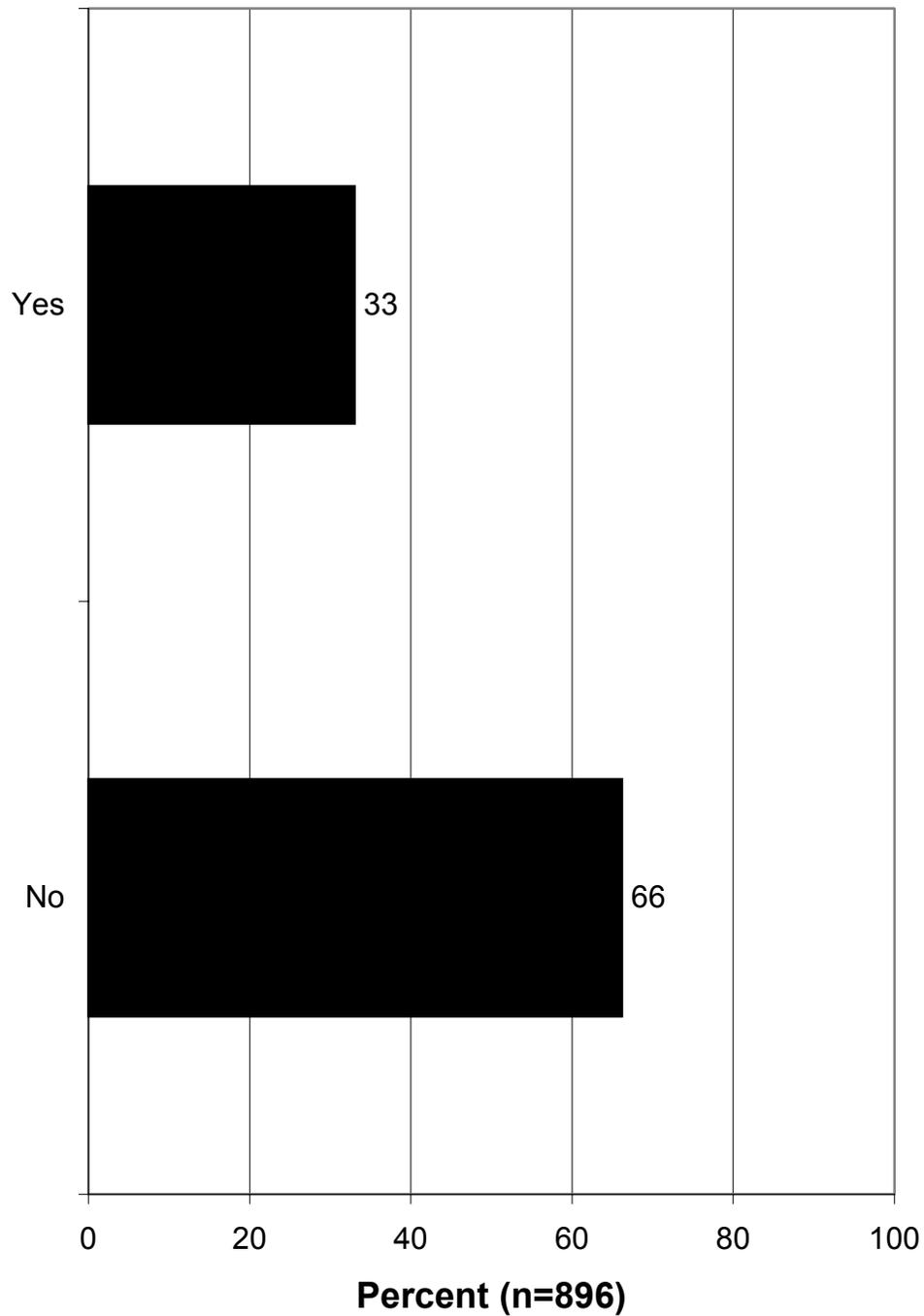
Q69. Do you use the Internet to find information about fishing? (asked of those who used the Internet).



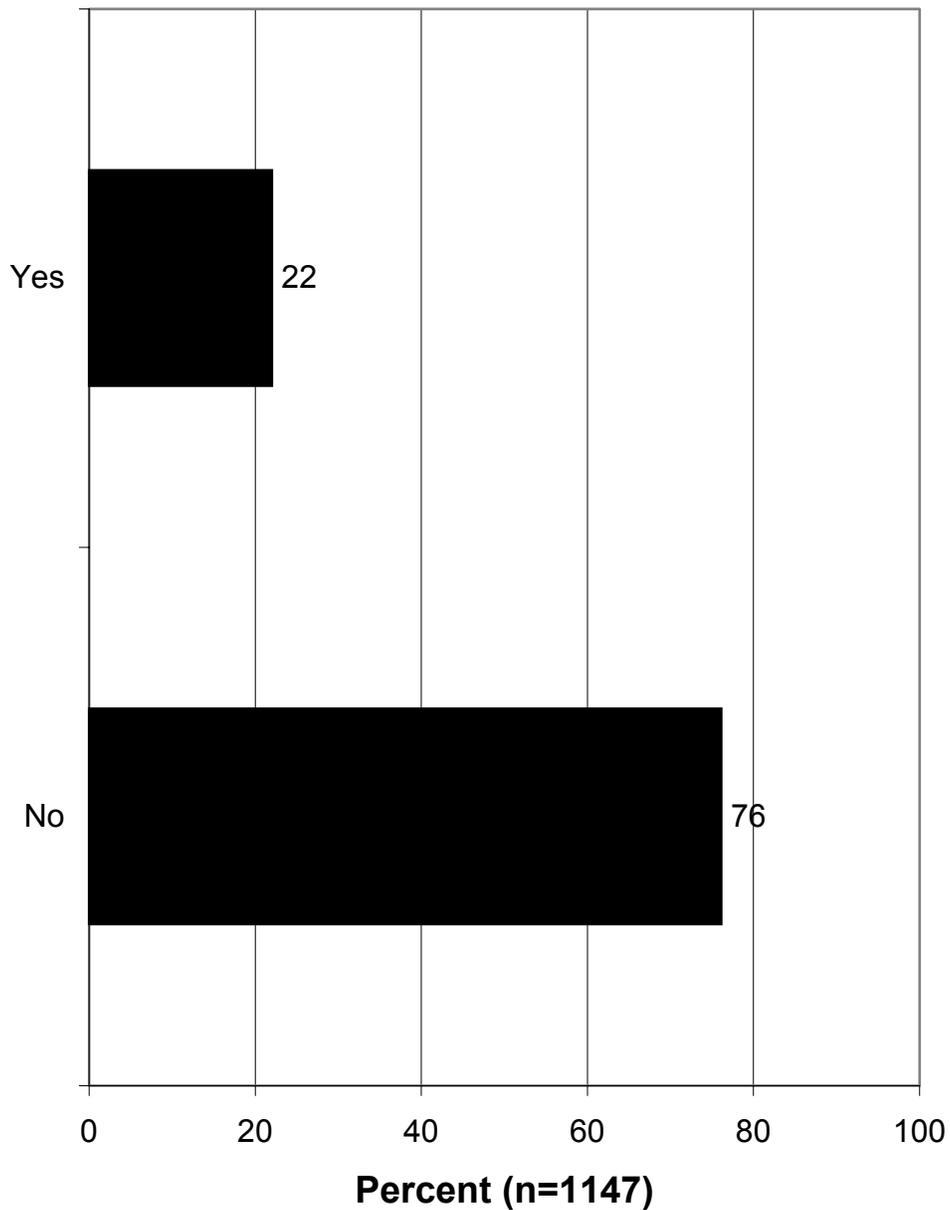
**Q70. Do you use the Internet to find information about aquatic animals?
(asked of those who used the Internet).**



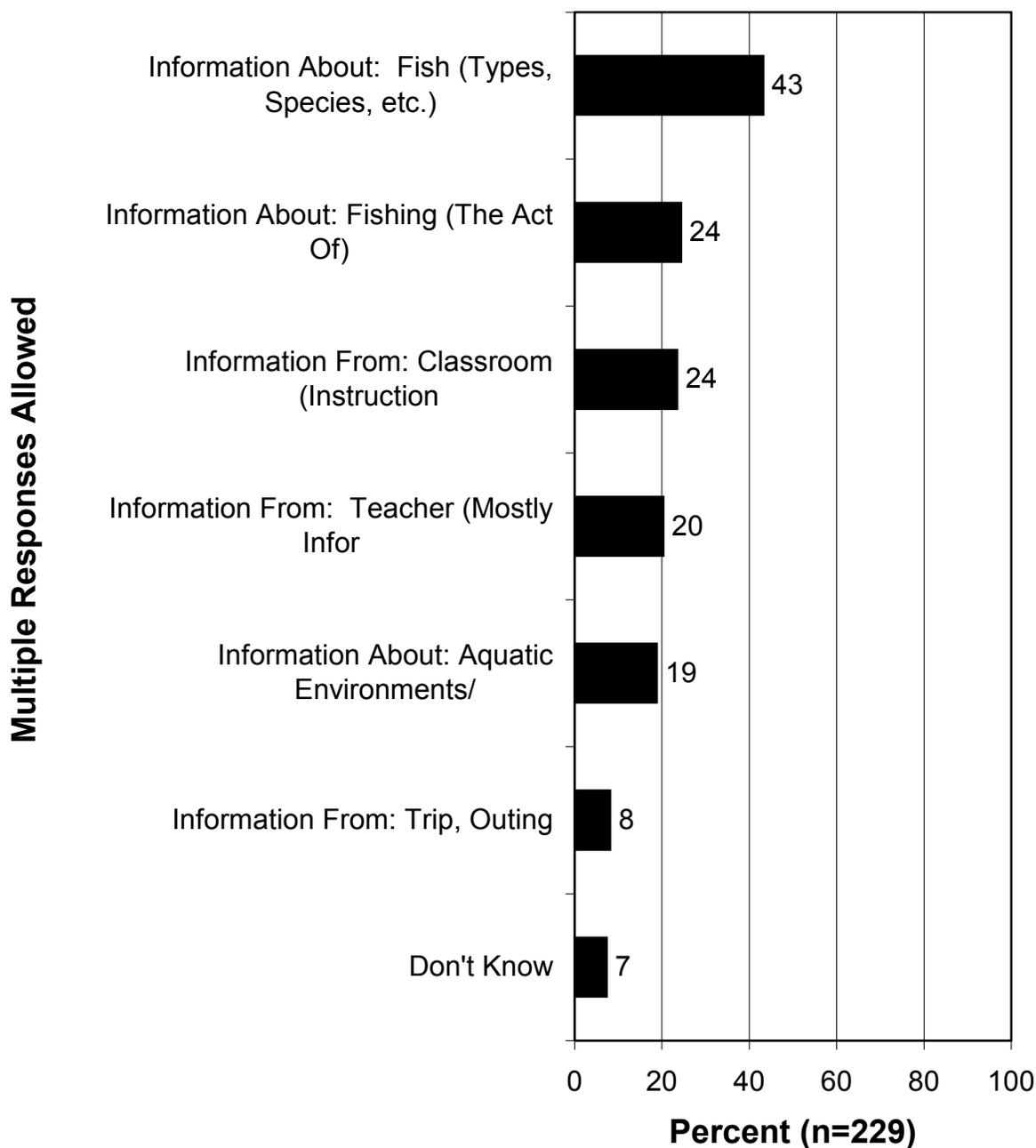
**Q71. Do you use the Internet to find information about aquatic habitats?
(asked of those who used the Internet).**



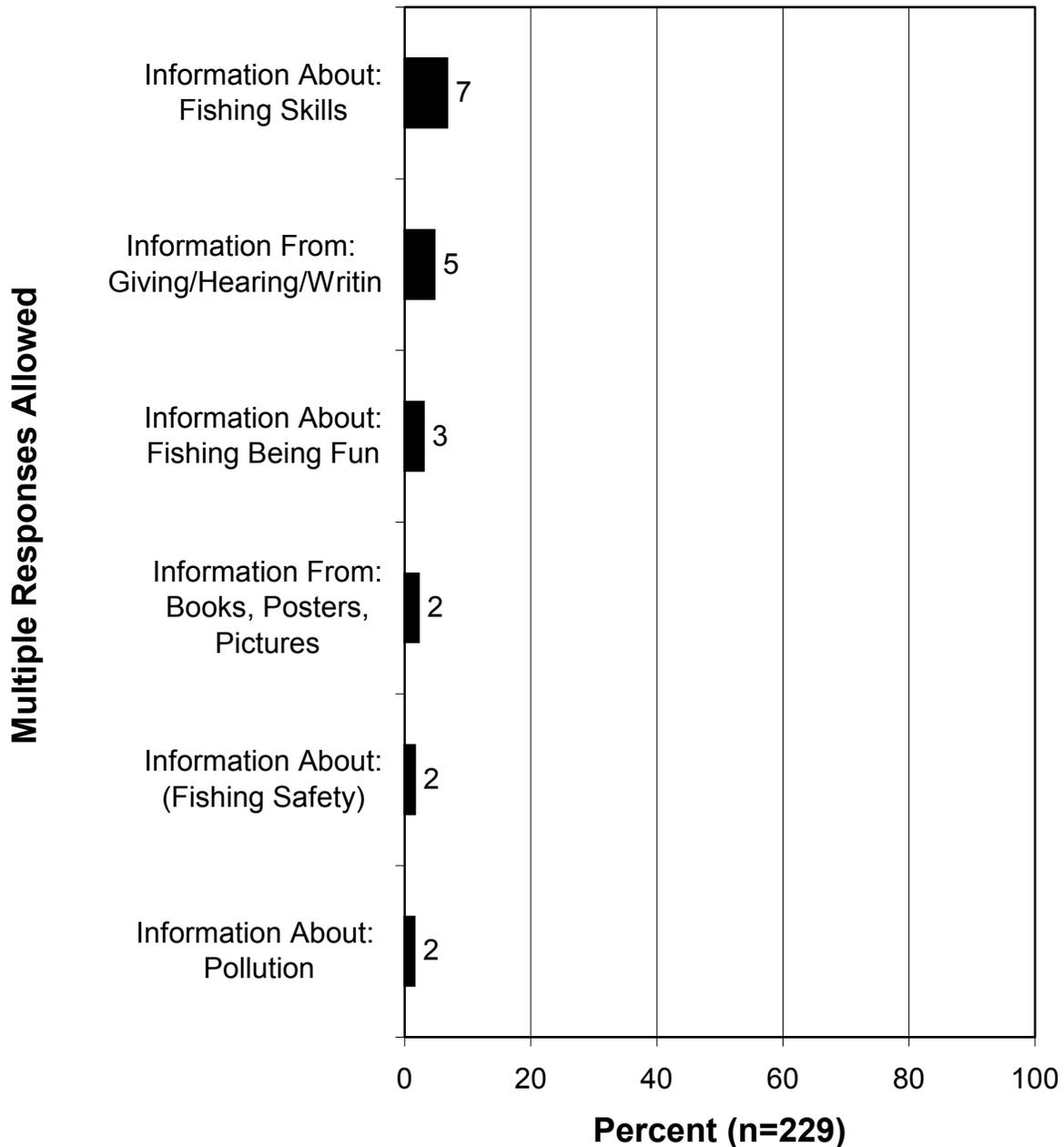
Q72. Within the past 12 months, have you seen or heard any information from teachers or other adults IN YOUR SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?



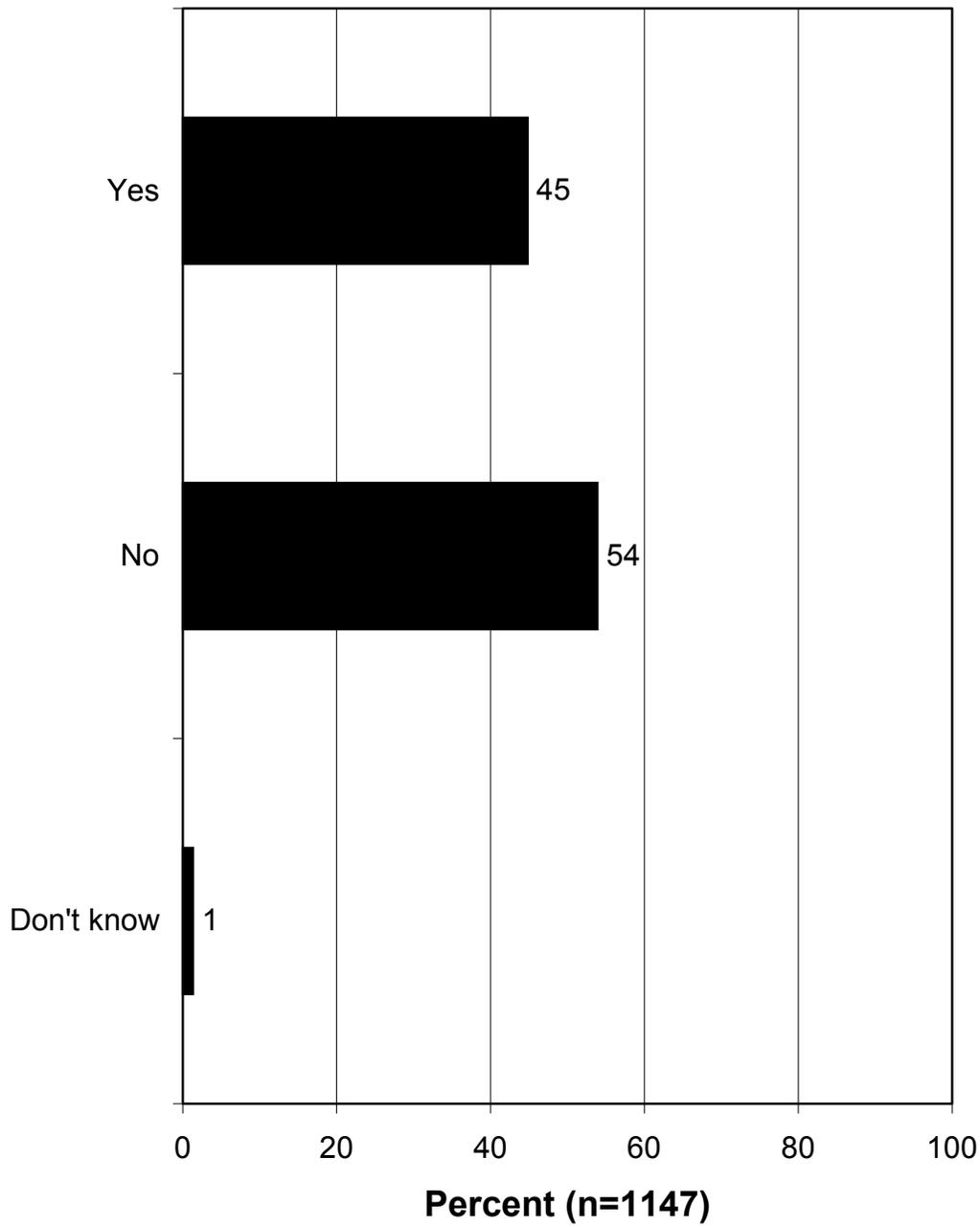
**Q73. What did you see or hear IN SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?
(asked of those who reported seeing or hearing information in school).**



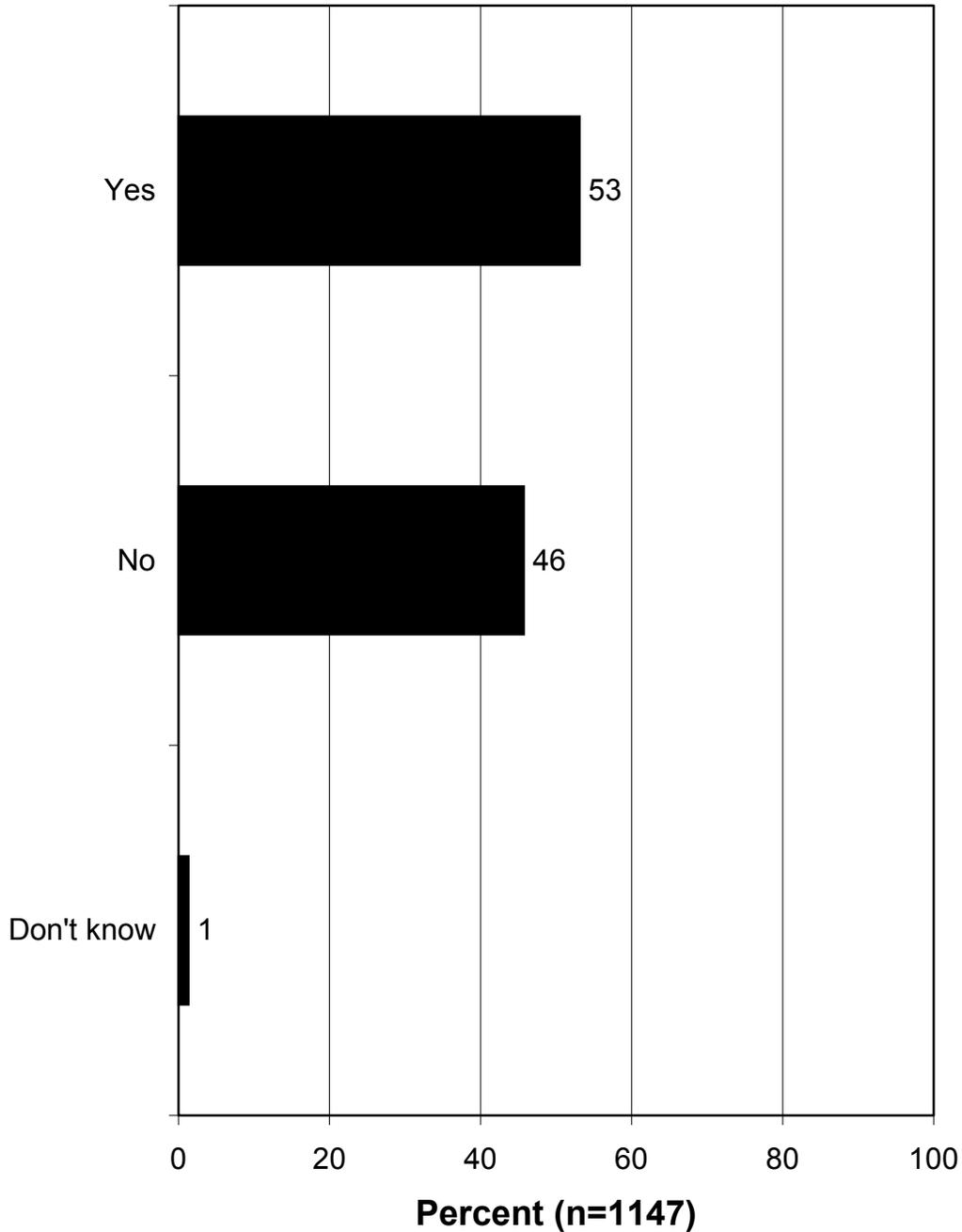
**Q73. Cont'd. What did you see or hear IN SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?
(asked of those who reported seeing or hearing information in school).**



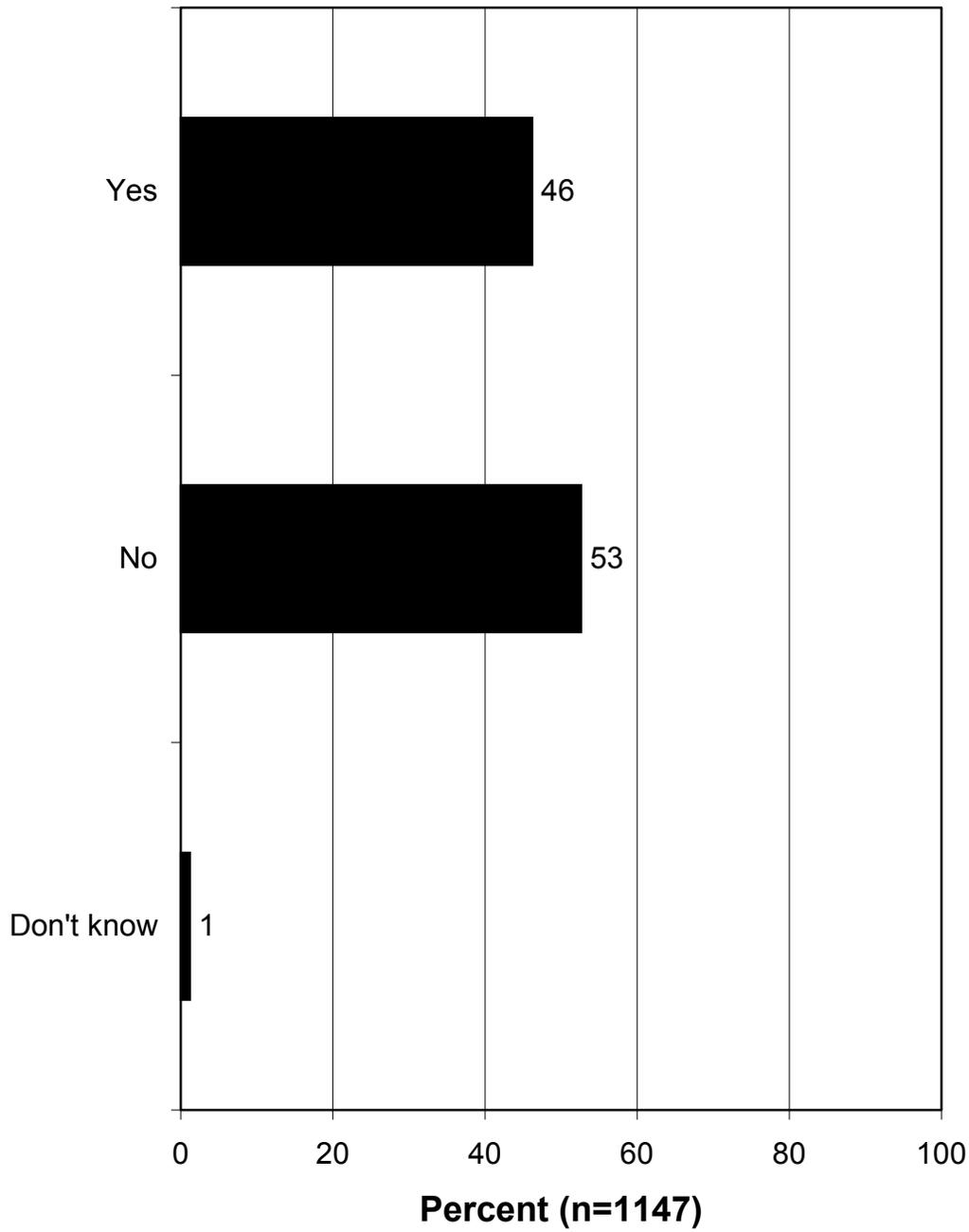
Q74. Within the past 12 months, have you seen or heard any information OUTSIDE OF SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?



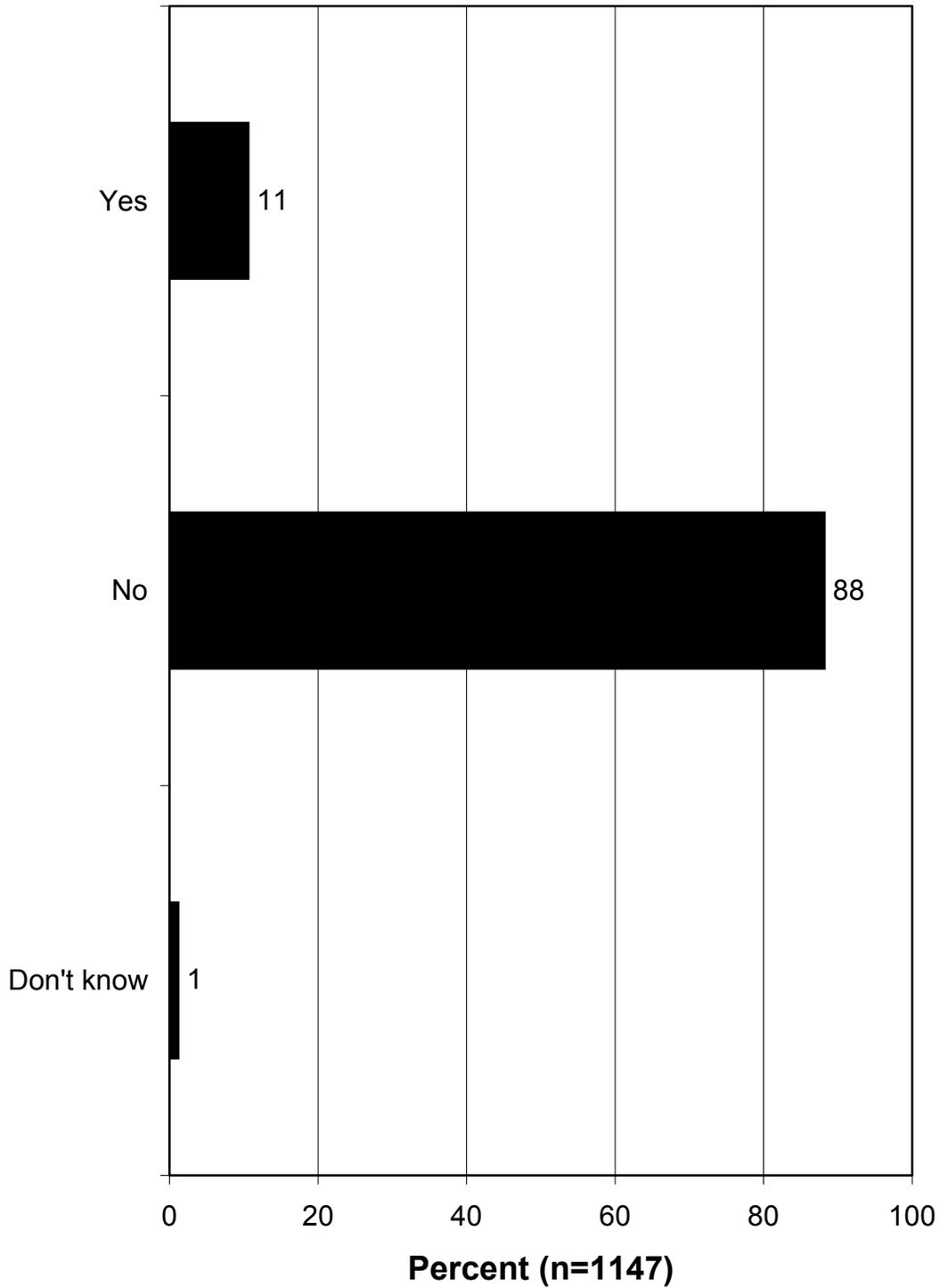
Q76. Within the past 12 months, did your school class do anything to help you learn about the oceans and the animals and plants that live there?



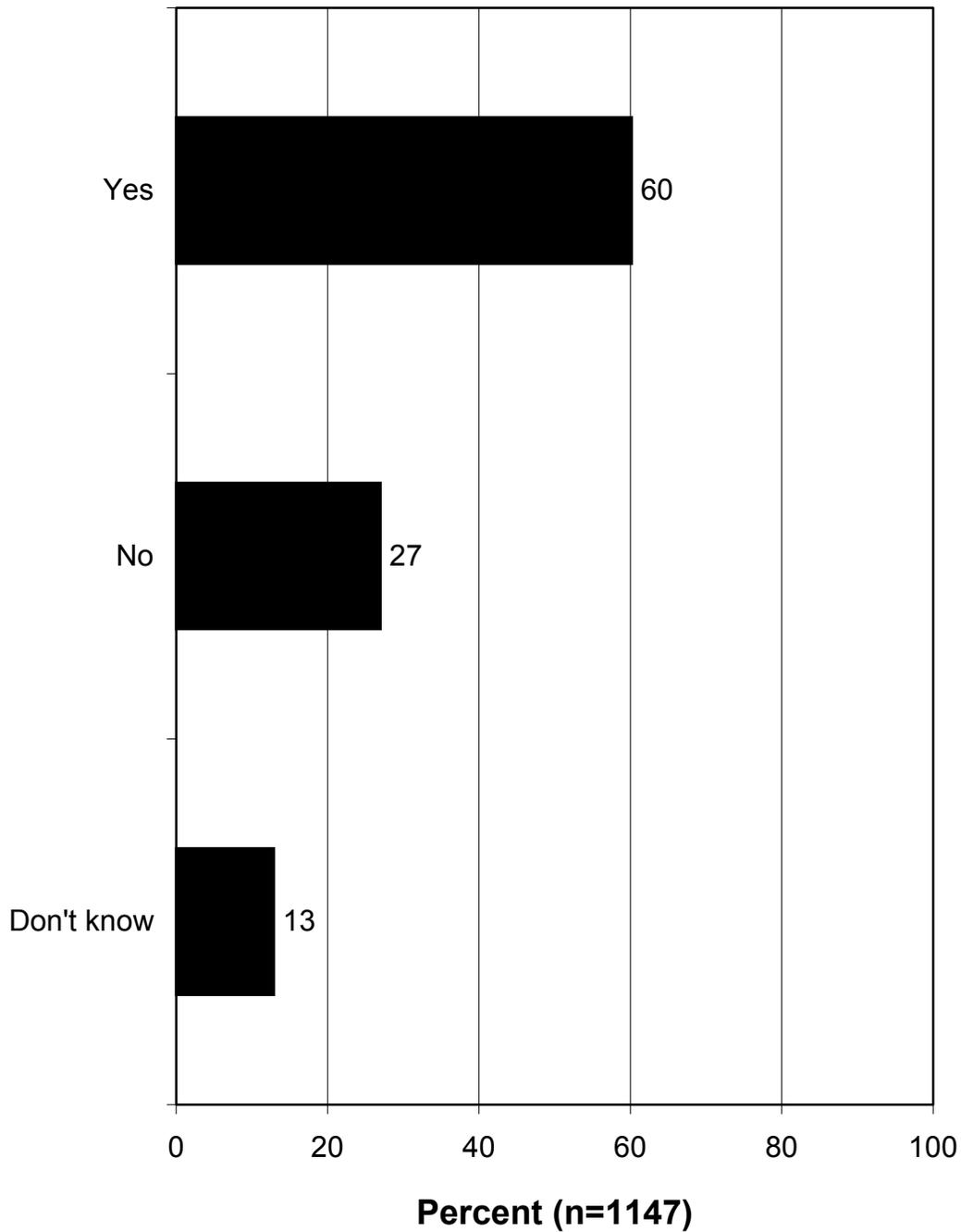
Q77. Within the past 12 months, did your school class do anything to help you learn about South Carolina rivers, ponds, lakes or streams and the animals and plants that live there?



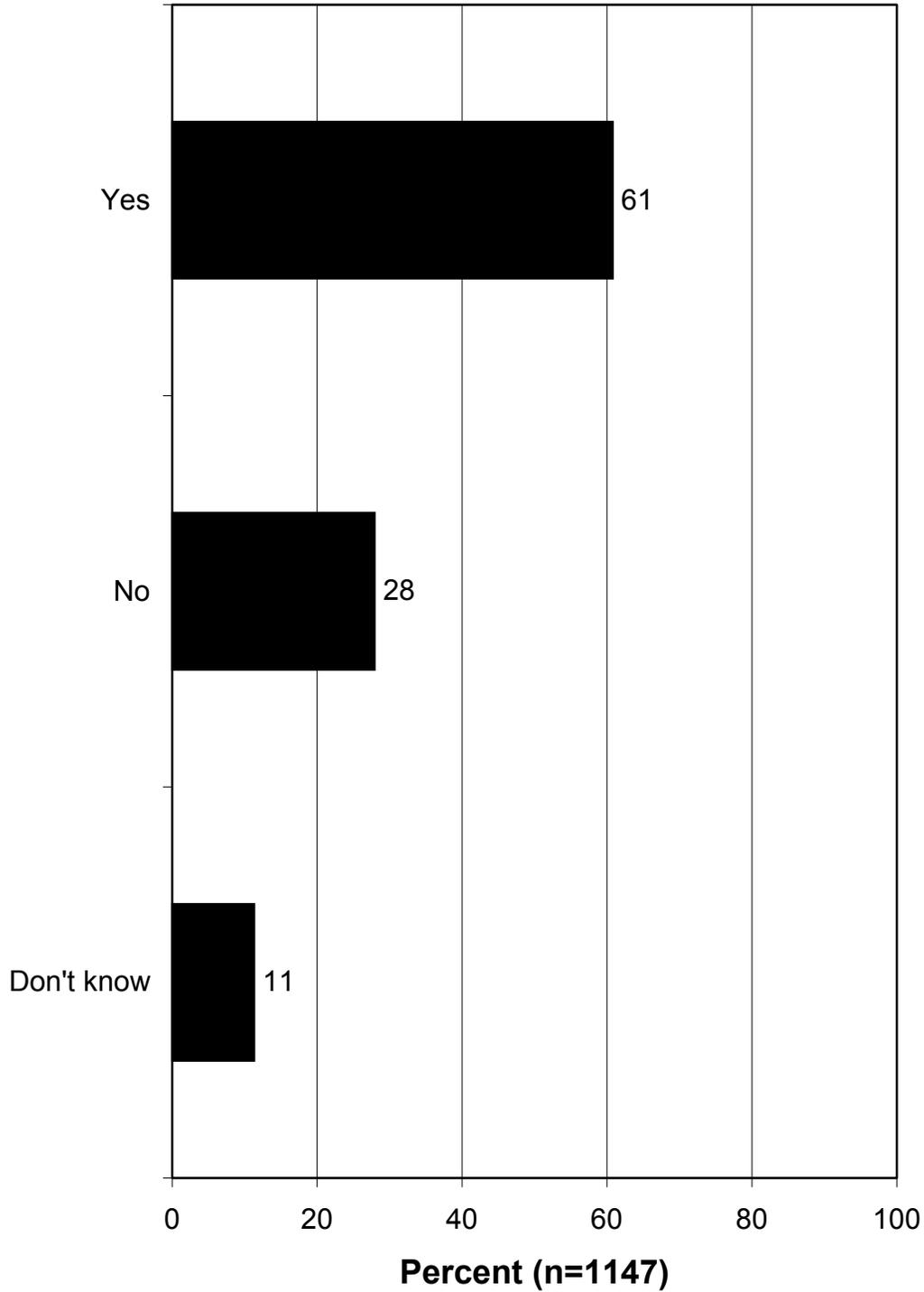
Q78. Do you belong to an animal or outdoor club?



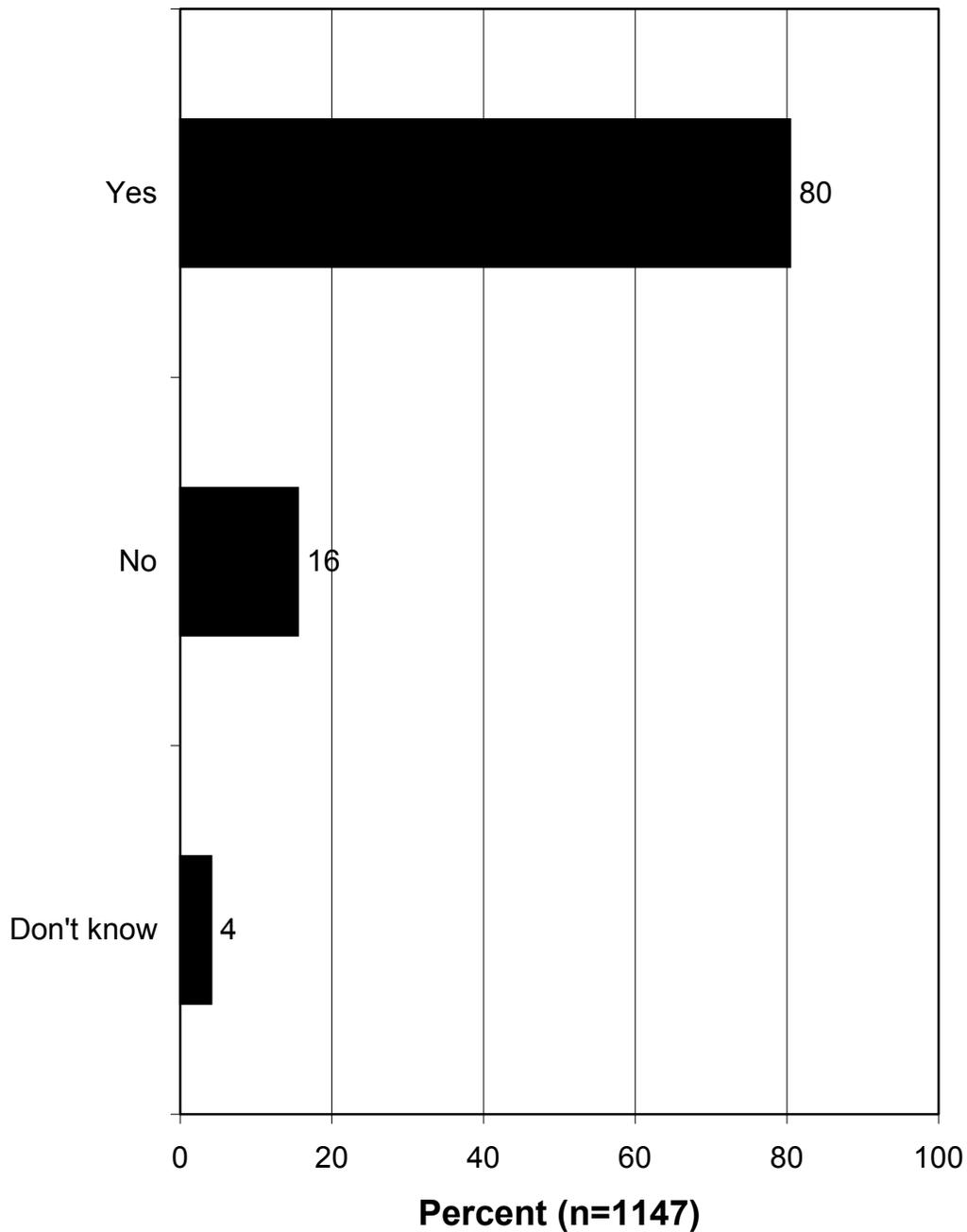
Q79. Would you join a club that helped you learn more about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live there?



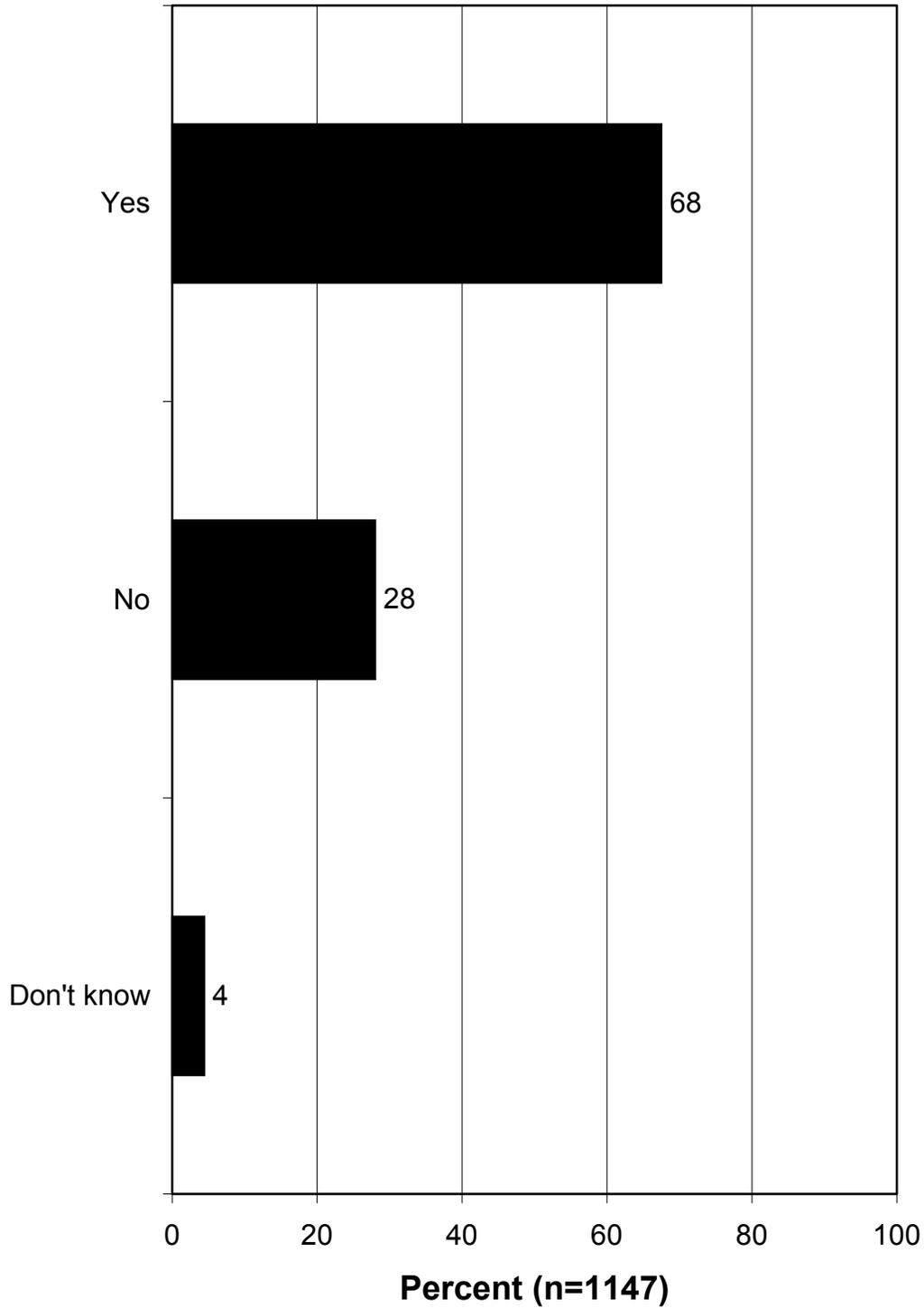
Q80. Would you join a club that helped you learn more about fishing?



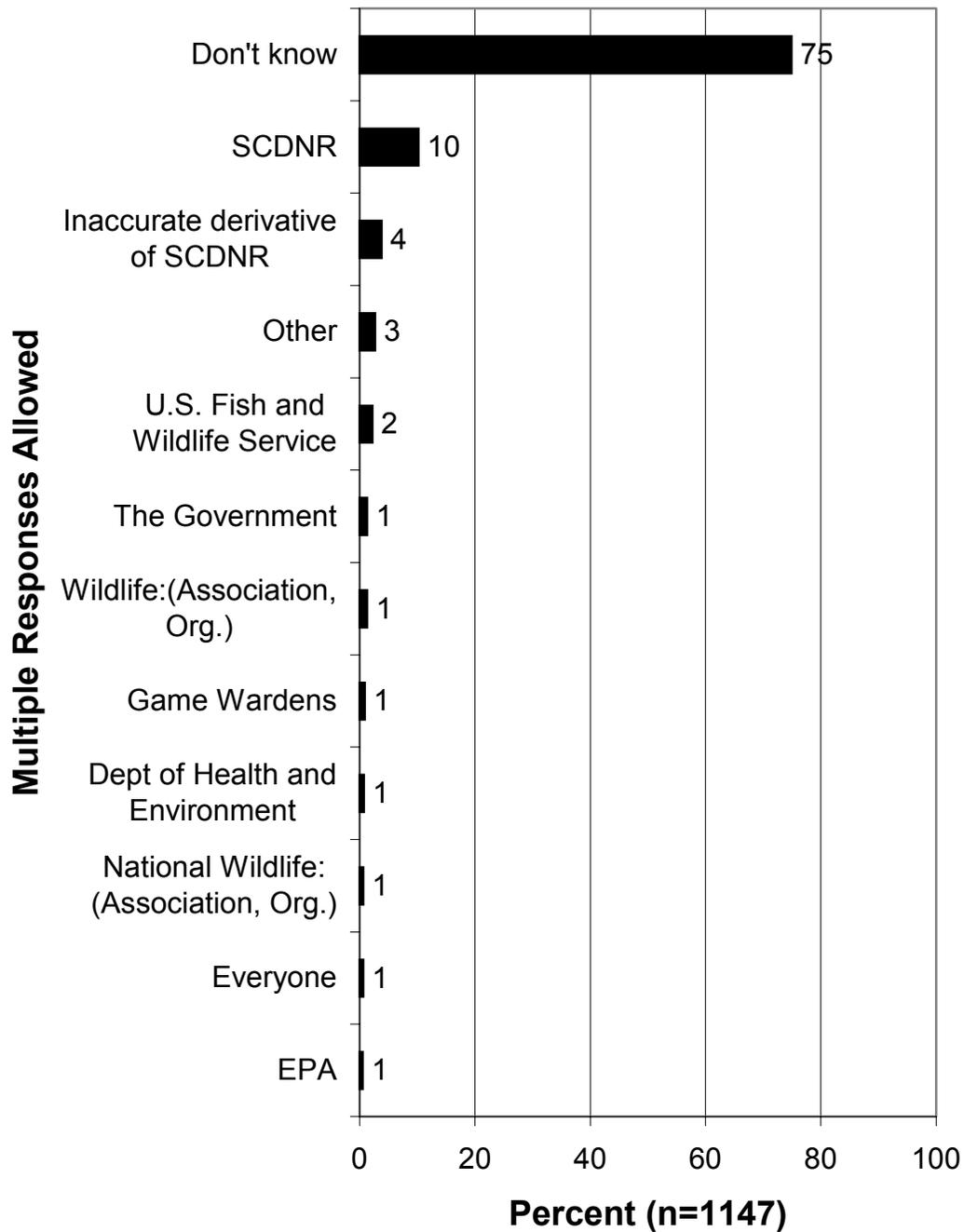
Q81. Would you like to learn more in your school class about South Carolina's rivers, ponds, lakes and streams and the animals and plants that live there?



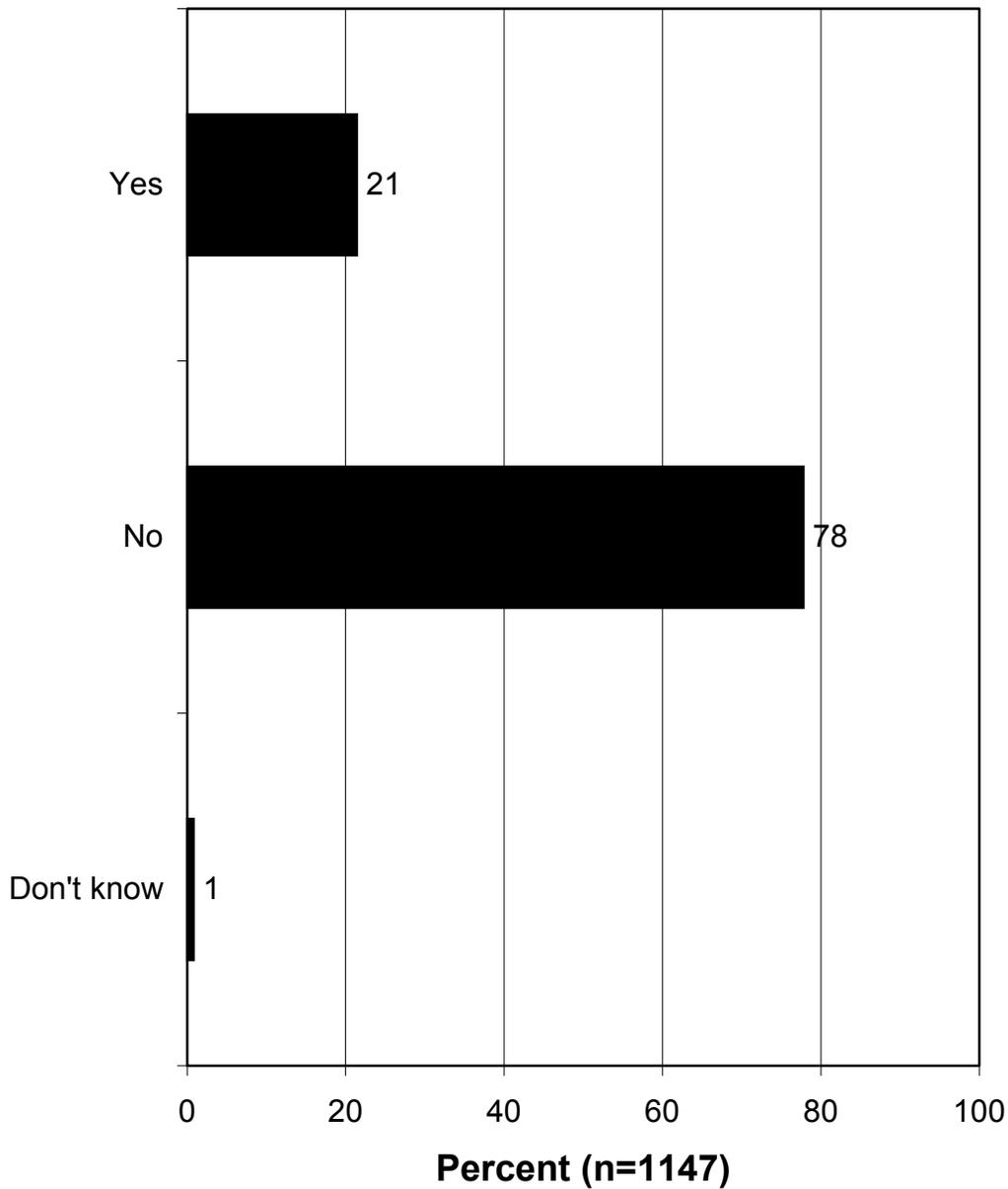
Q82. Would you like to learn more in your school class about fishing?



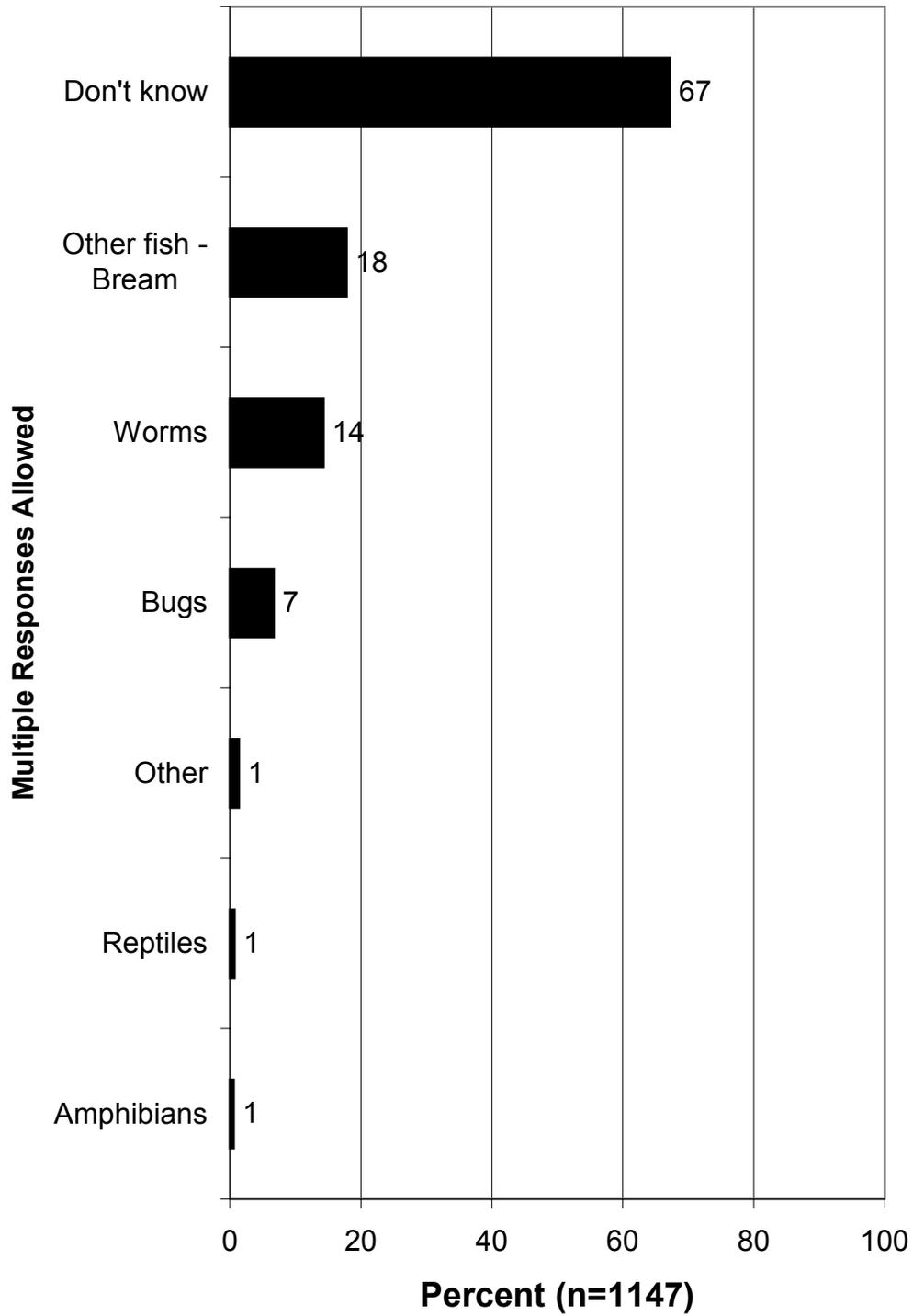
Q84. Who do you think is the state agency responsible for managing and conserving fish and wildlife in South Carolina?



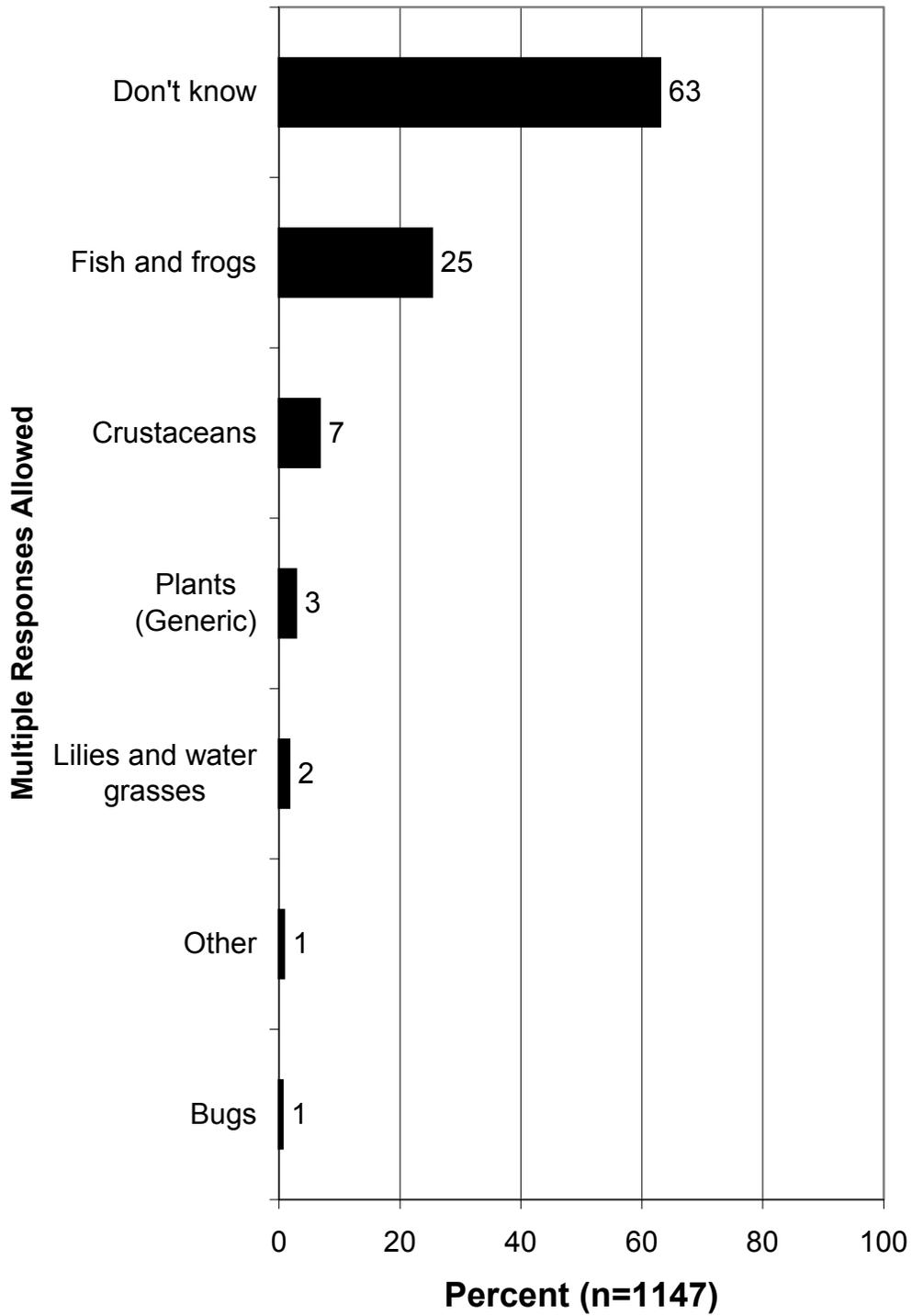
Q86. The South Carolina DNR provides a number of fishing programs, such as "Hooked on Fishing," the "Fishing Tackle Loaner Program," and "South Carolina Reel Kids," to name a few. Have you heard of any of these programs?



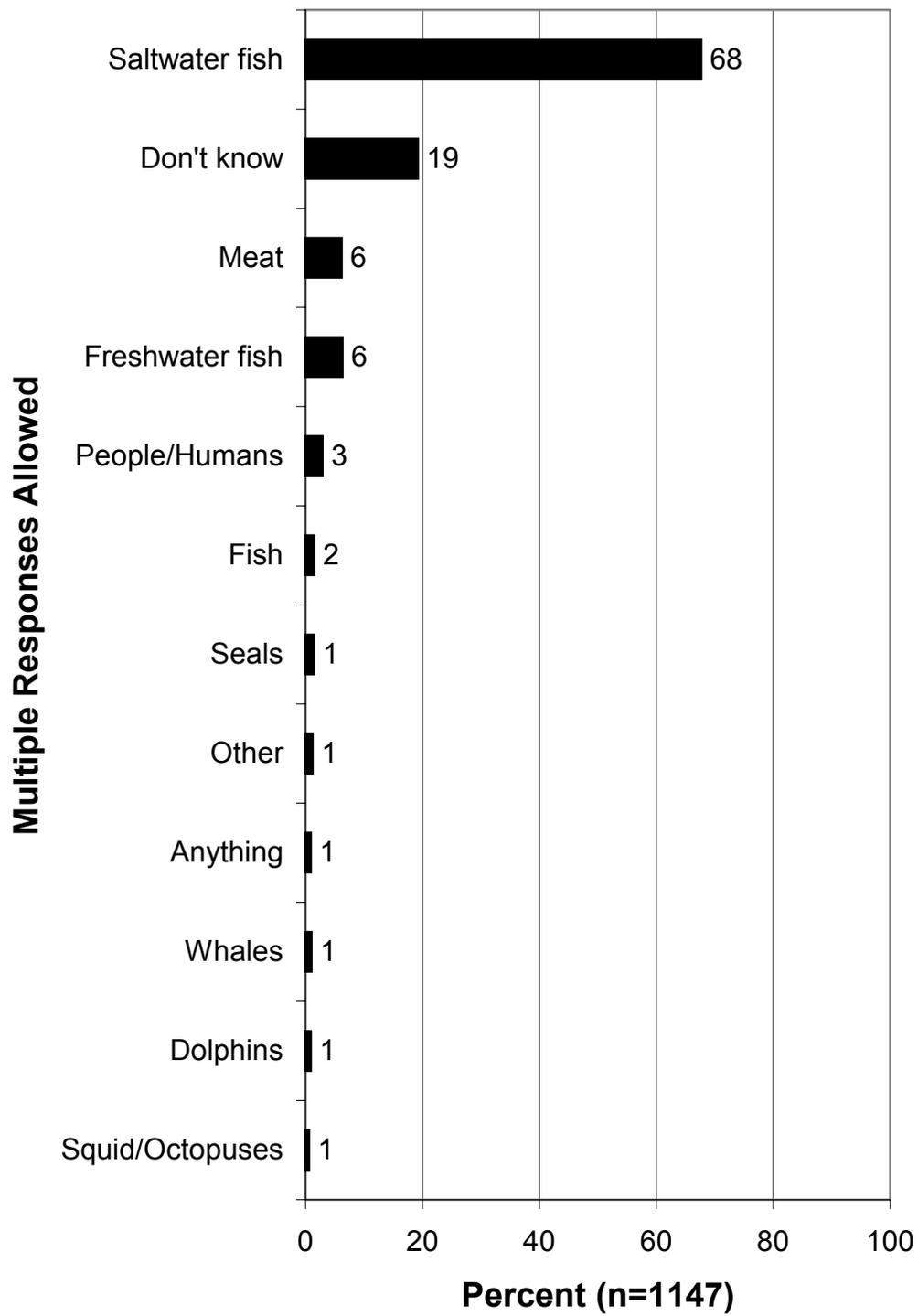
Q90. What kind of food do largemouth bass eat?



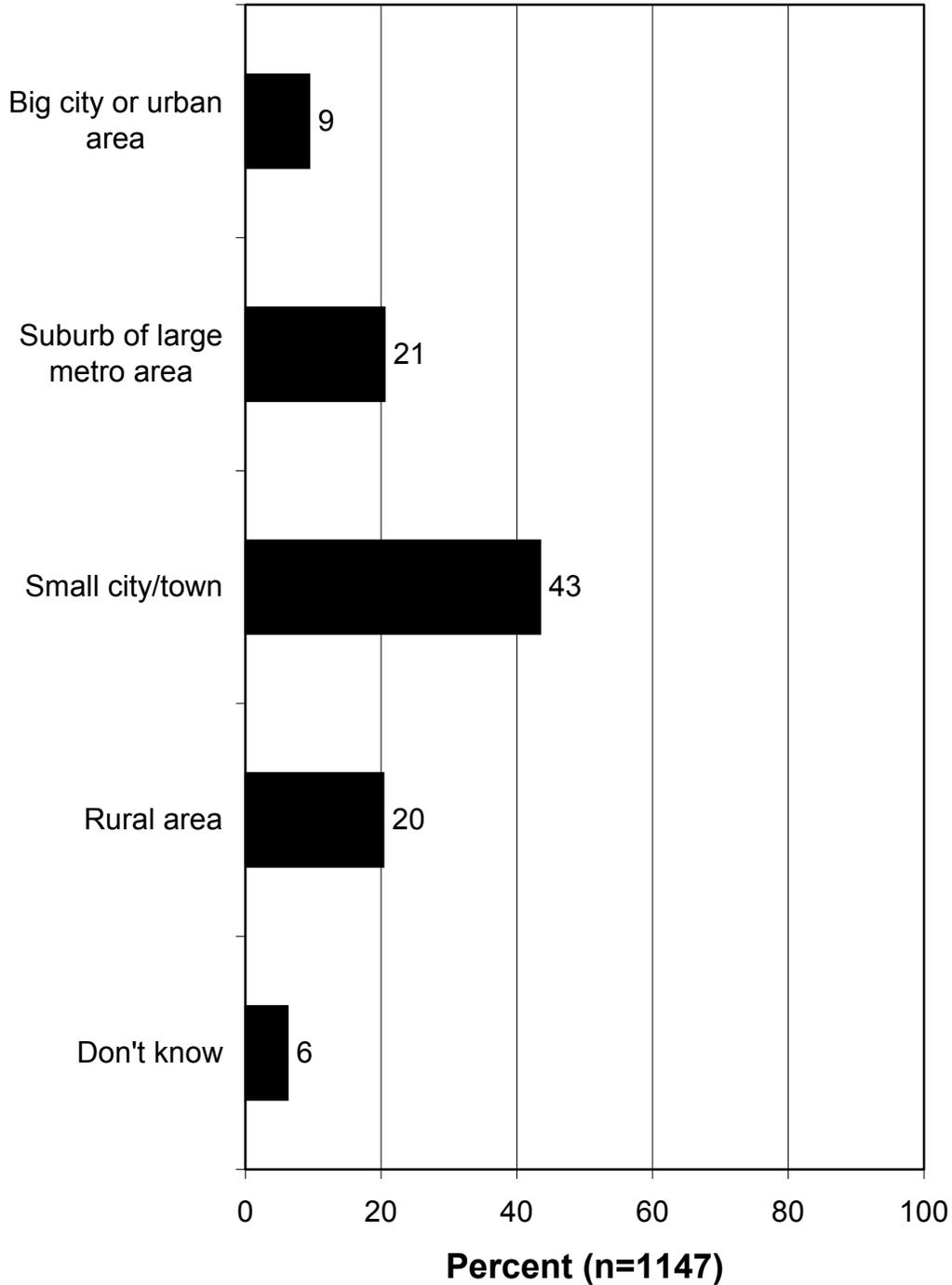
Q93. What does a river otter usually eat?



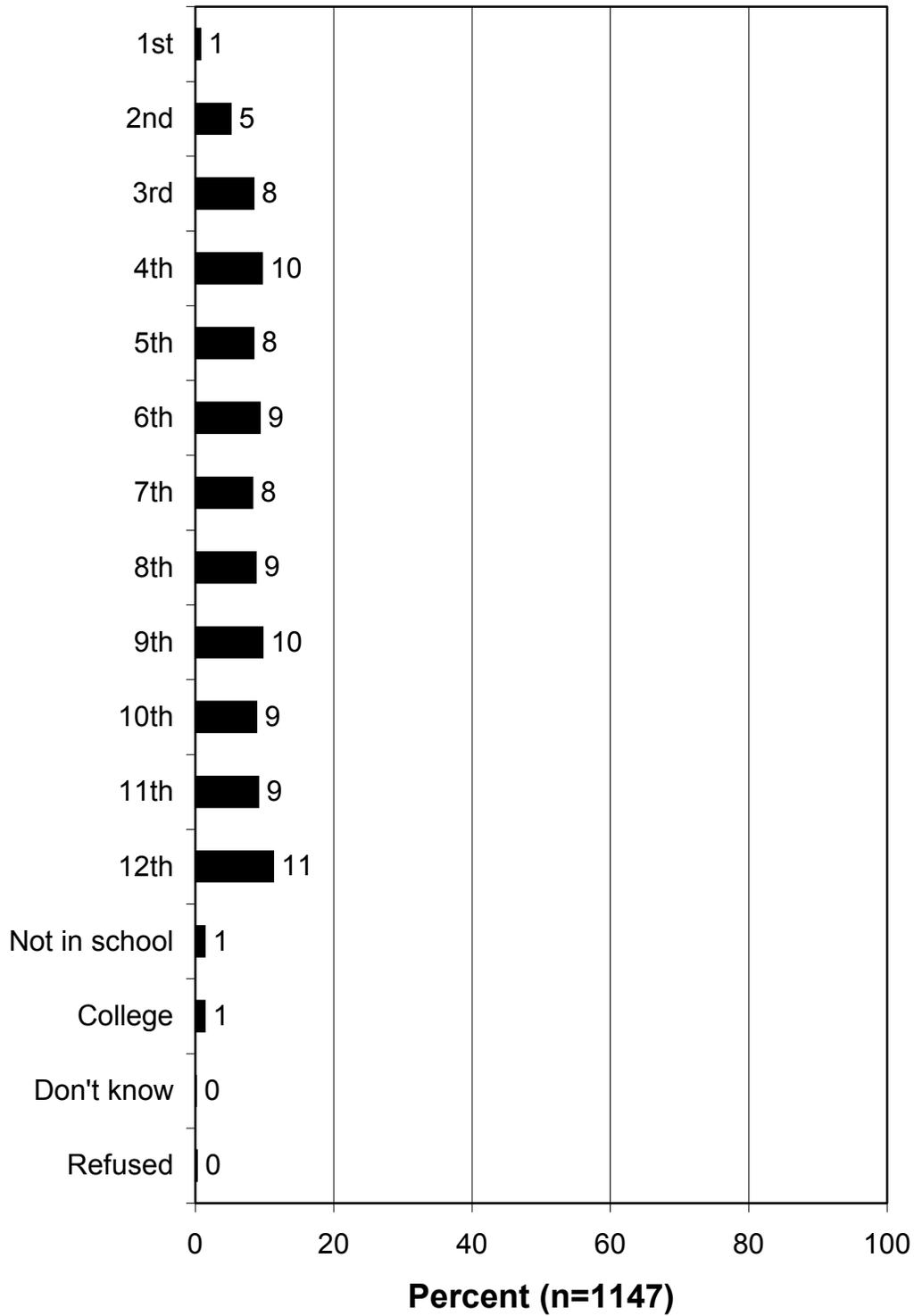
Q96. What type of food do sharks usually eat?



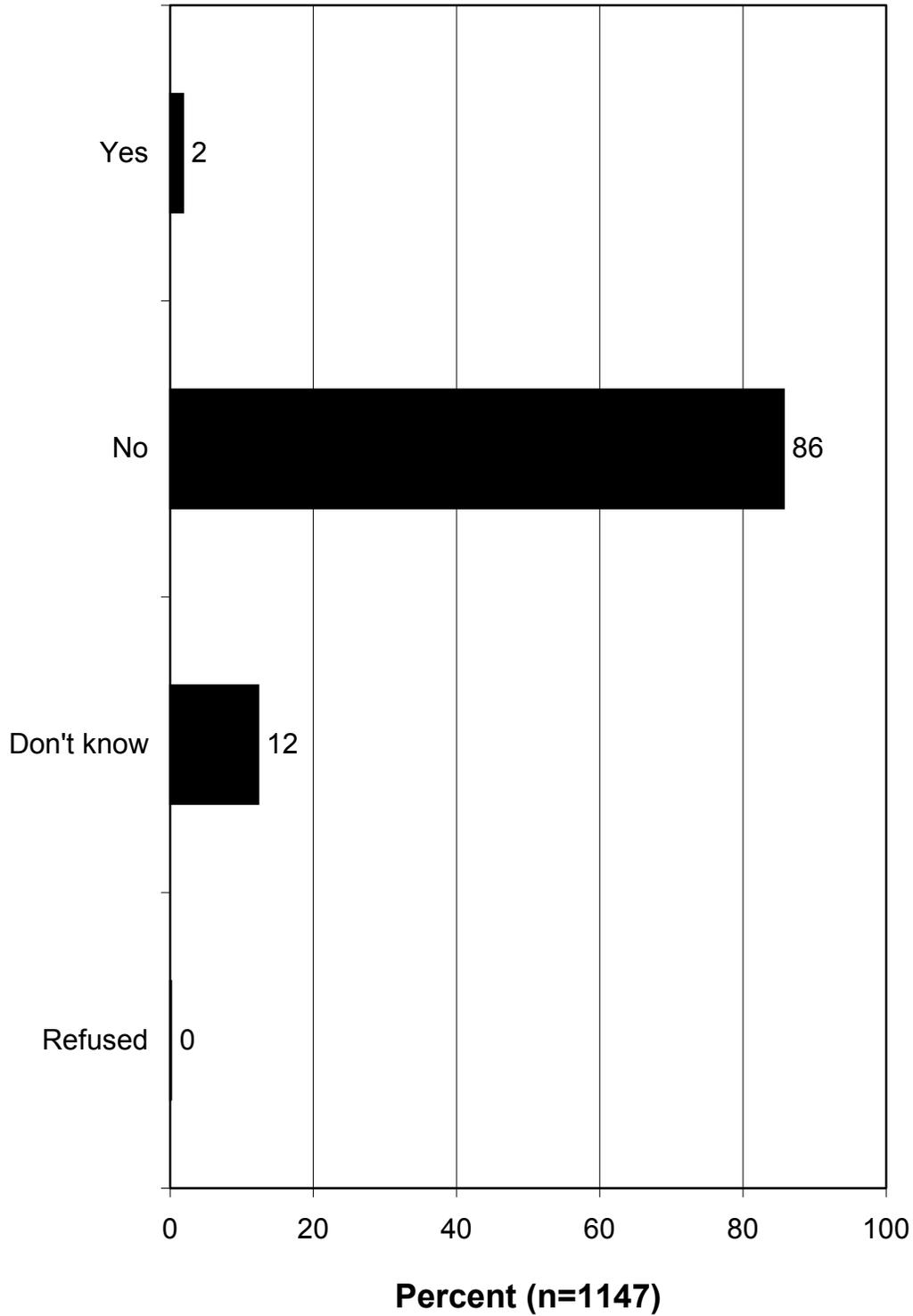
Q99. Do you consider where you live to be a big city, a suburban area, a small city/town or a rural area?



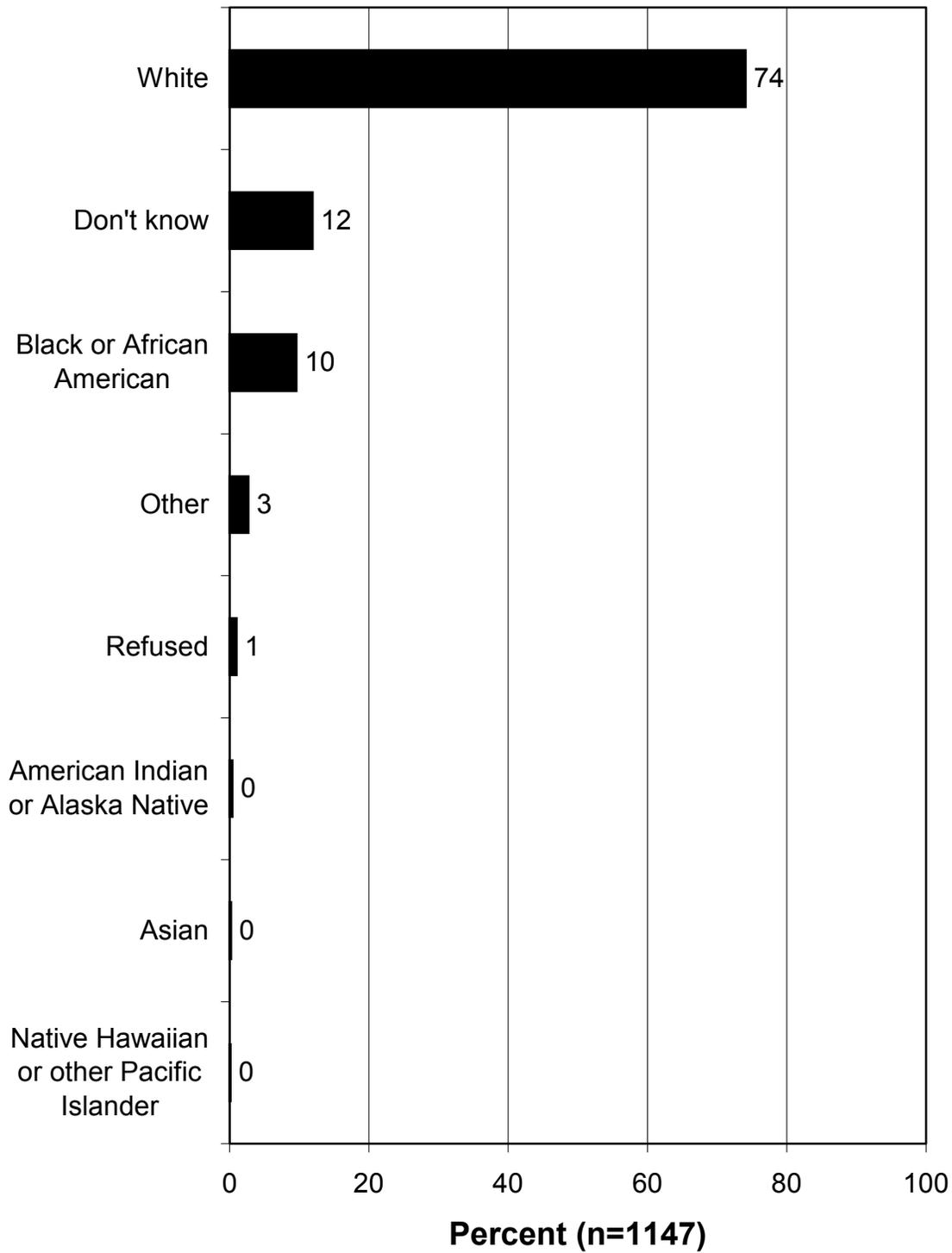
Q100. What grade in school are you in?



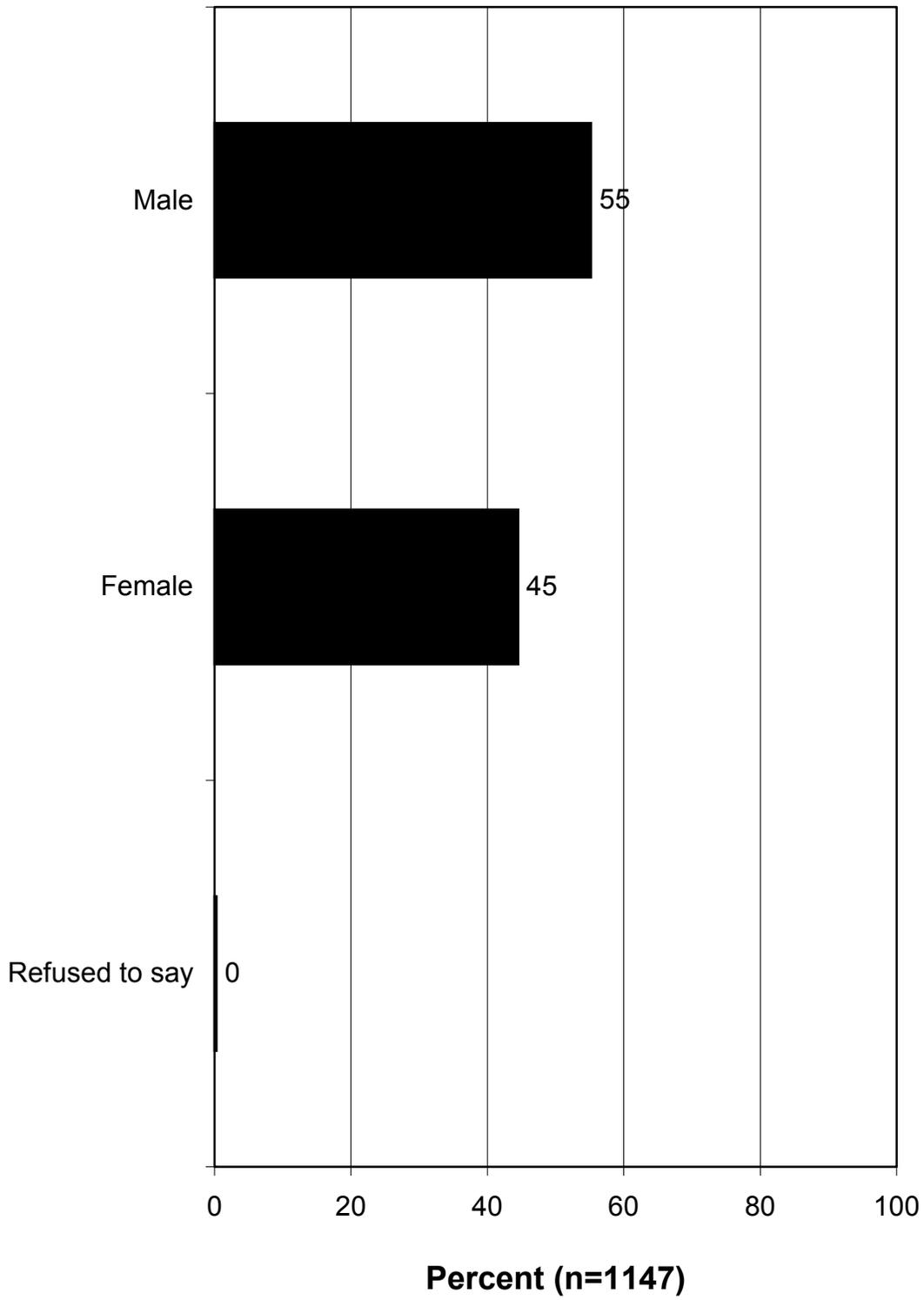
Q101. Are you of Hispanic or Latino ethnicity?



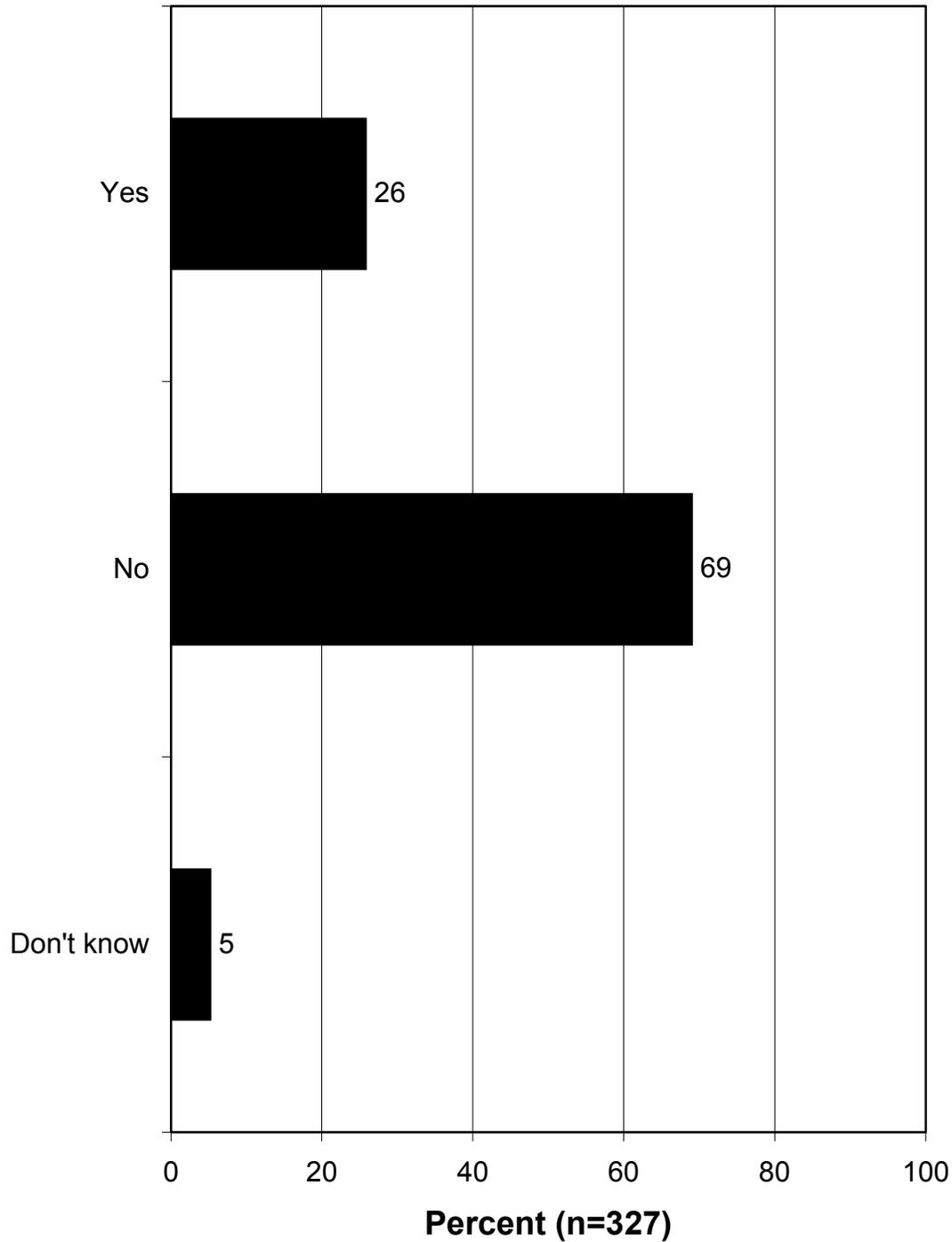
Q102. What race do you consider yourself?



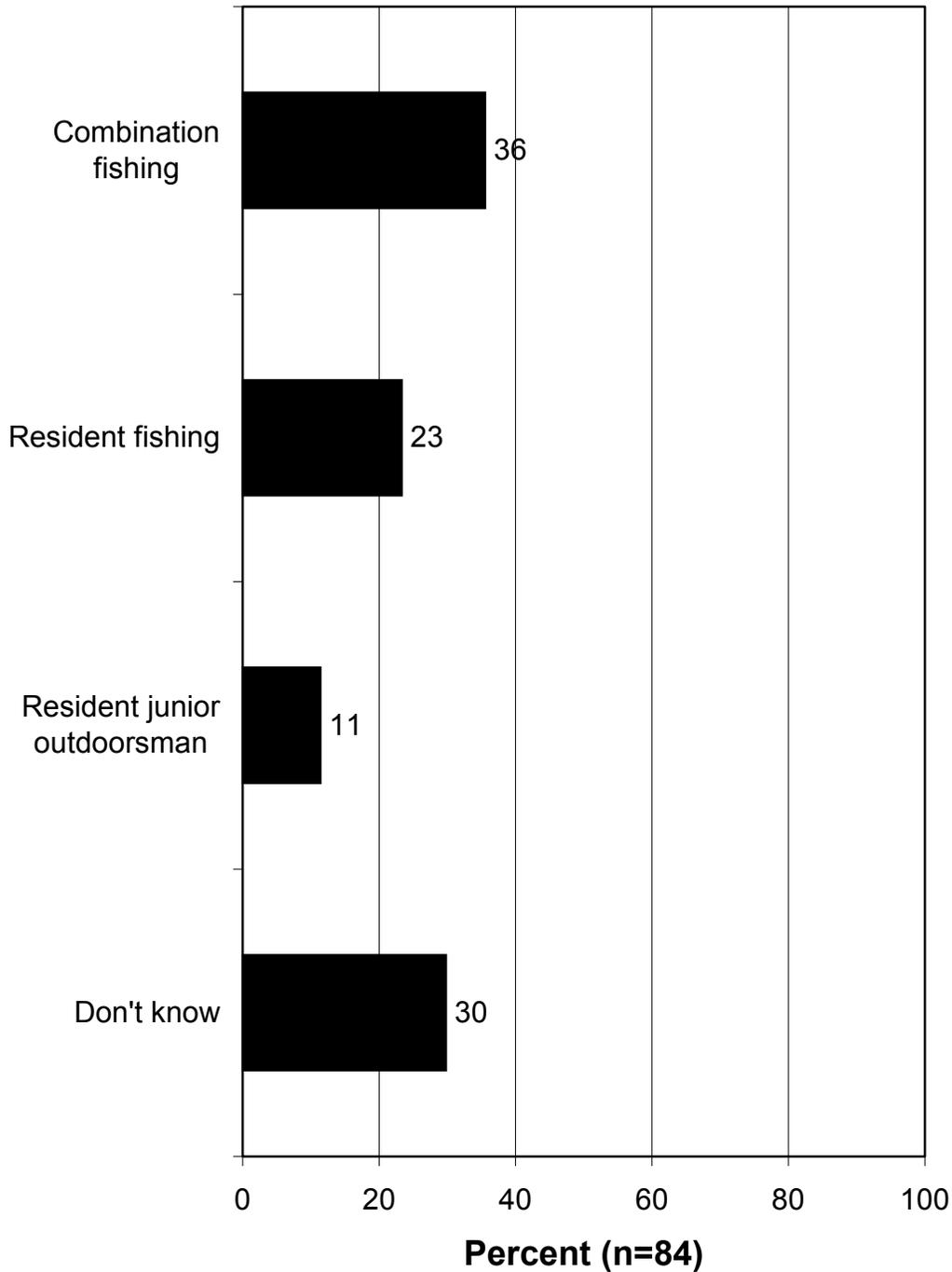
Q103. And what is your gender?



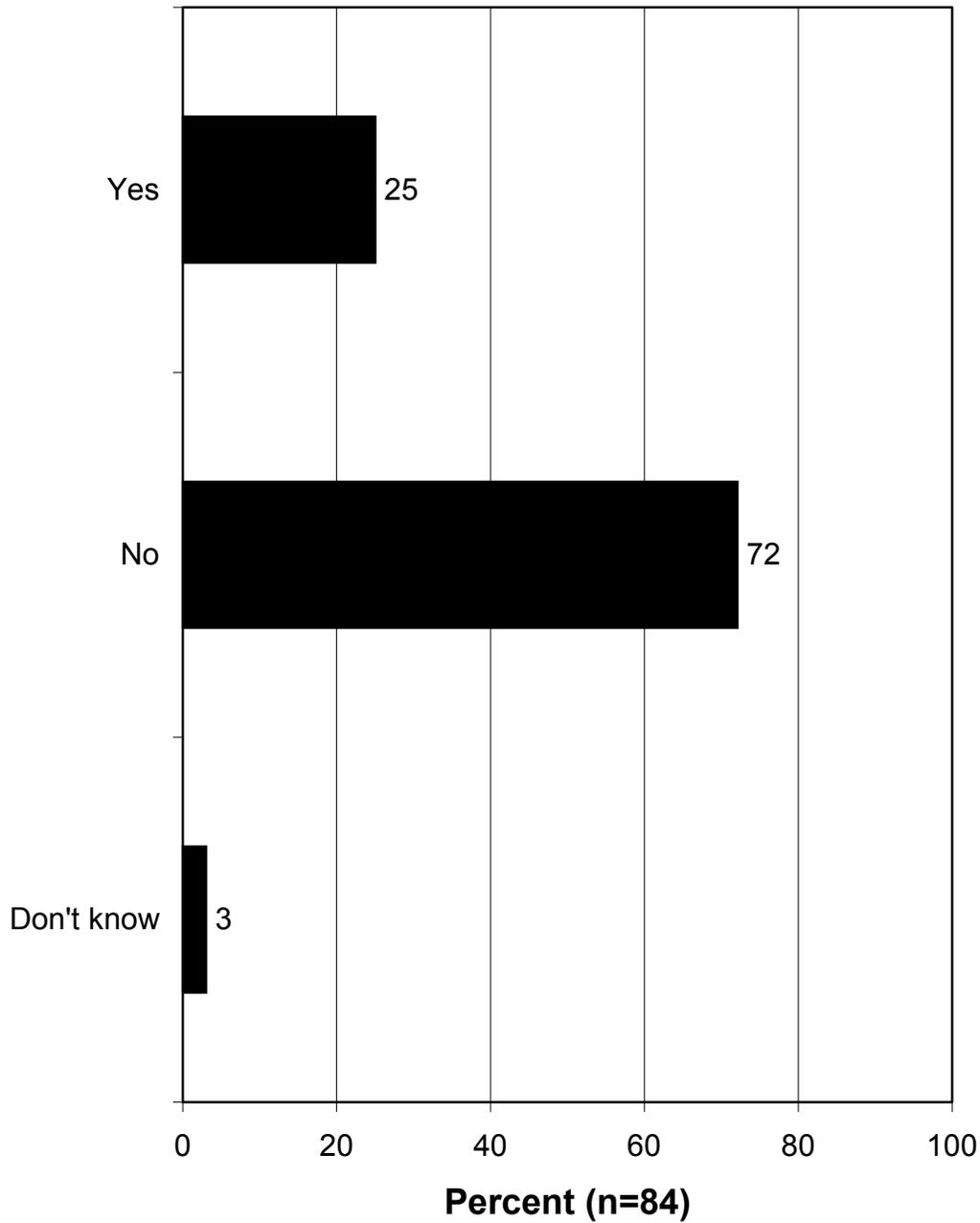
**Q105. Have you purchased a South Carolina fishing license?
(asked of those aged 16 or older).**



**Q106. What type of South Carolina fishing license did you buy?
(asked of those who reported purchasing a South Carolina fishing license).**

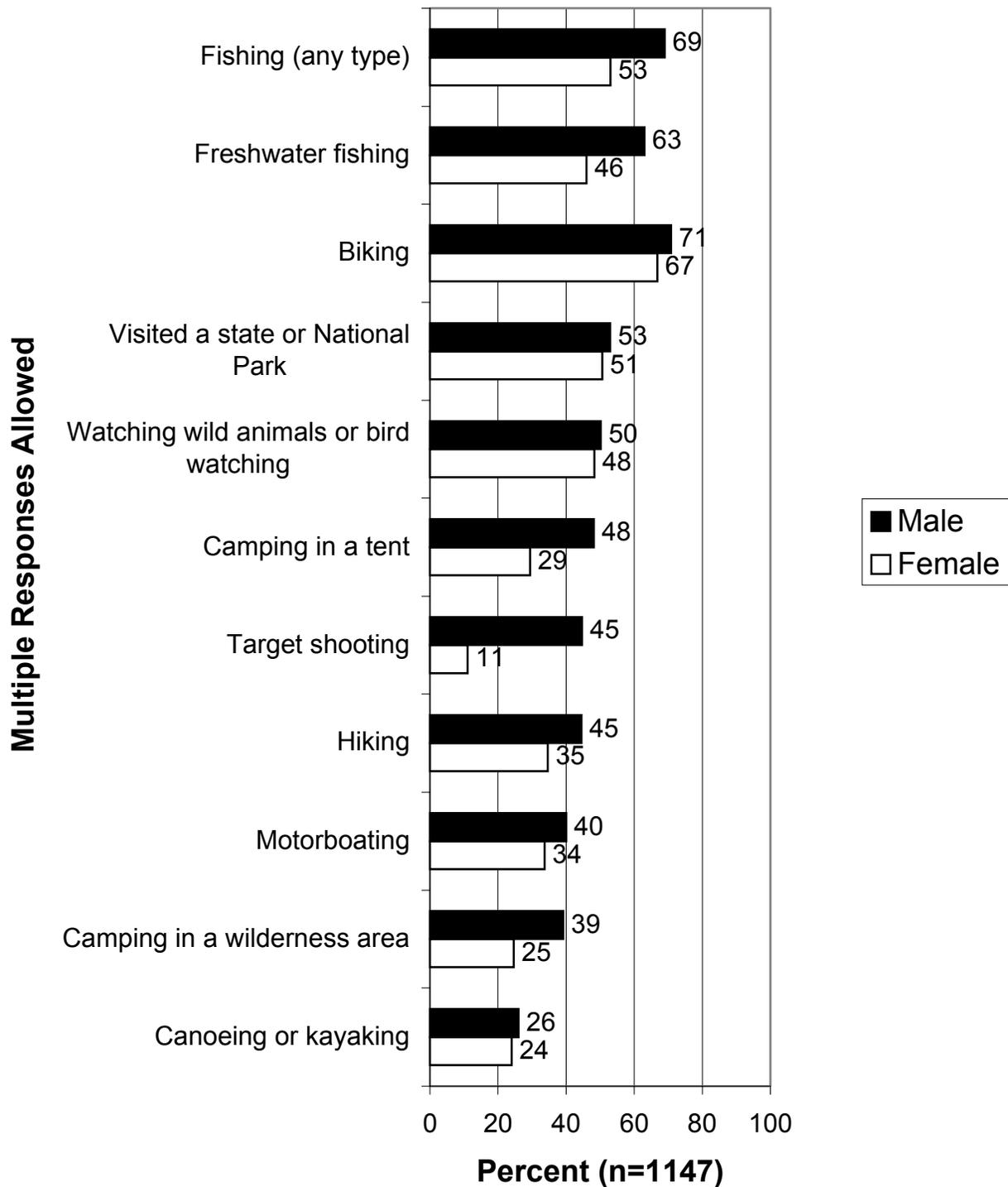


**Q107. Does the fact that you are required to buy a fishing license keep you from buying a license and going fishing?
(asked of those who reported purchasing a South Carolina fishing license).**

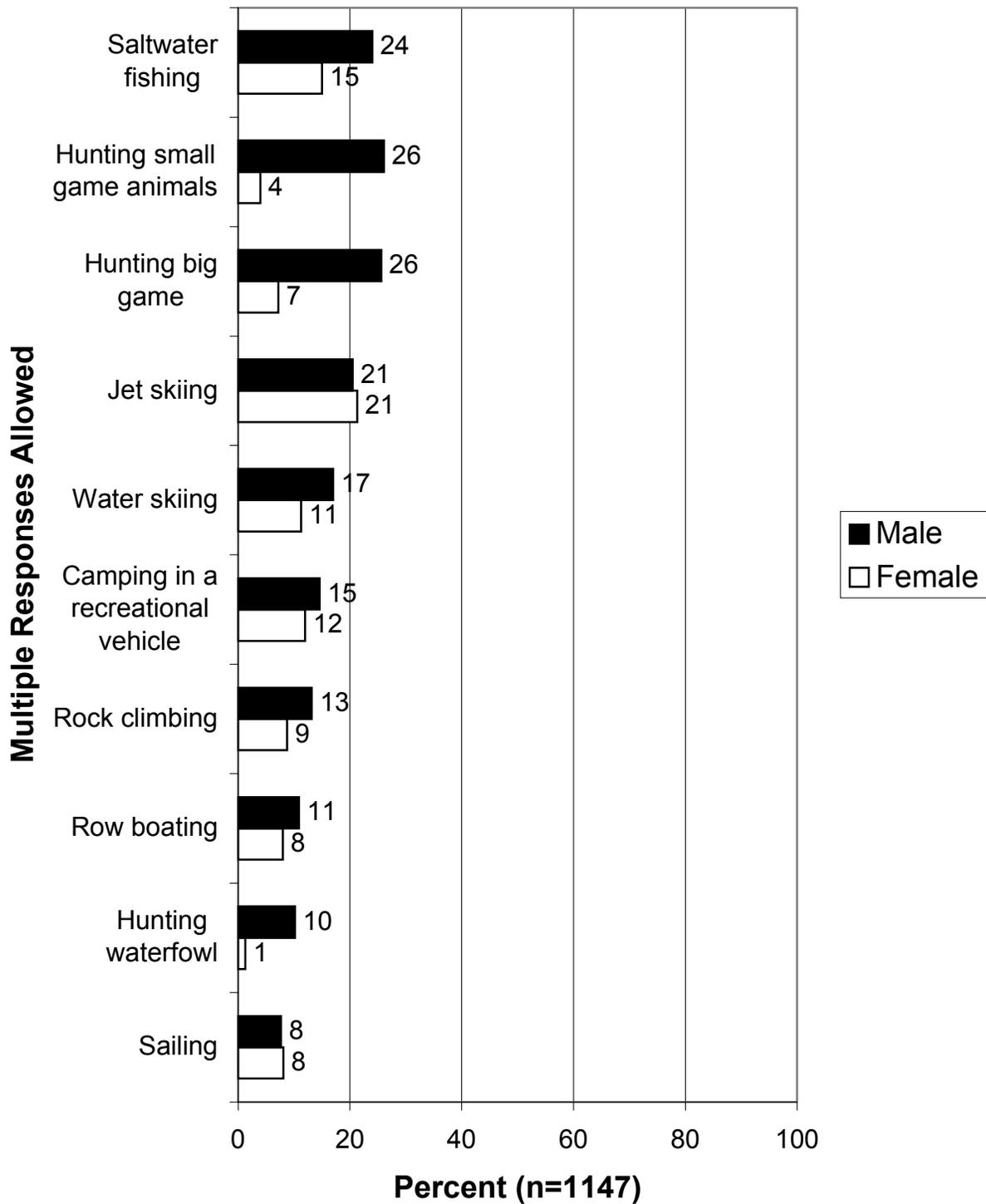


Graphs by Gender

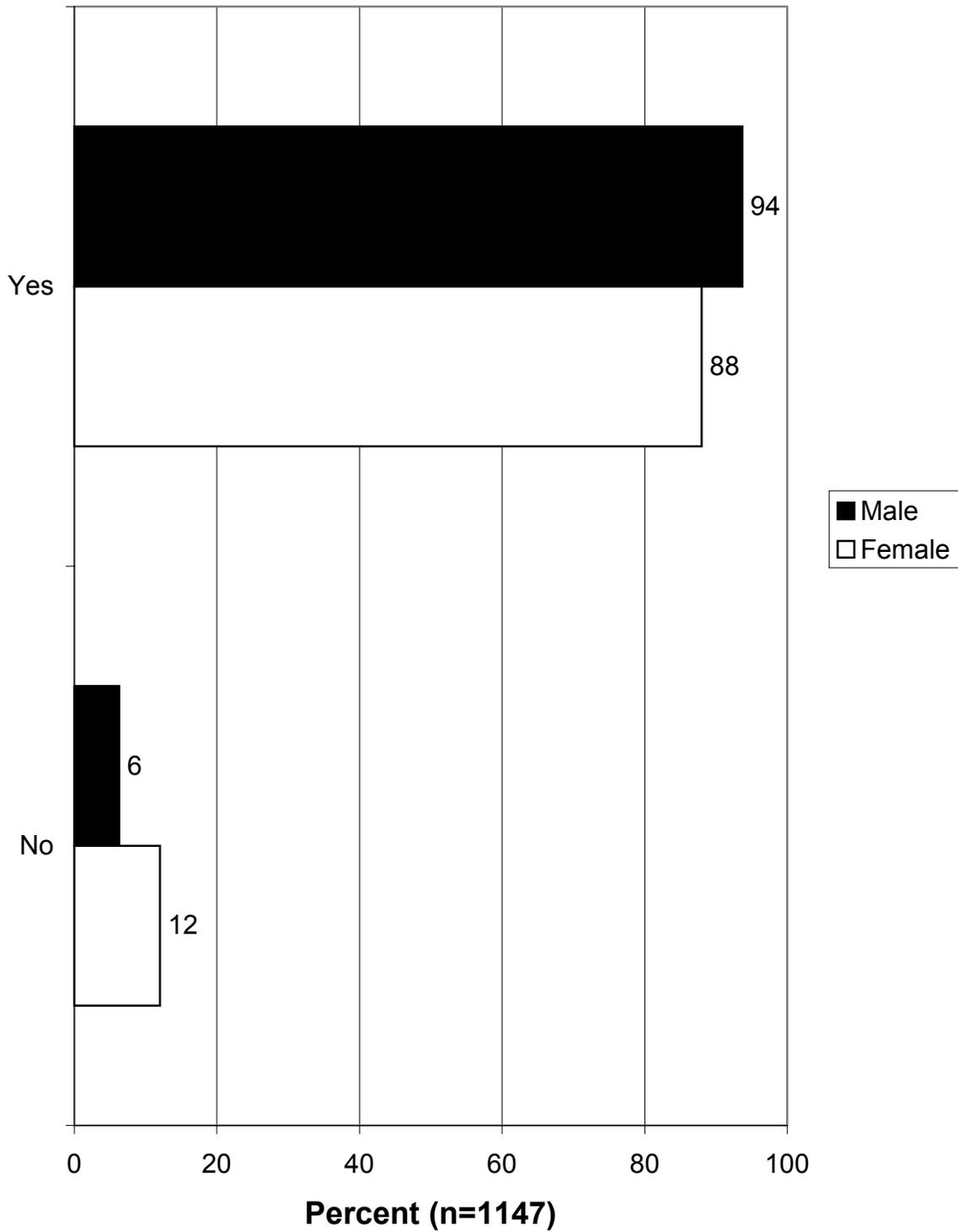
Q8. Activities participated in within the past 12 months. By Gender.



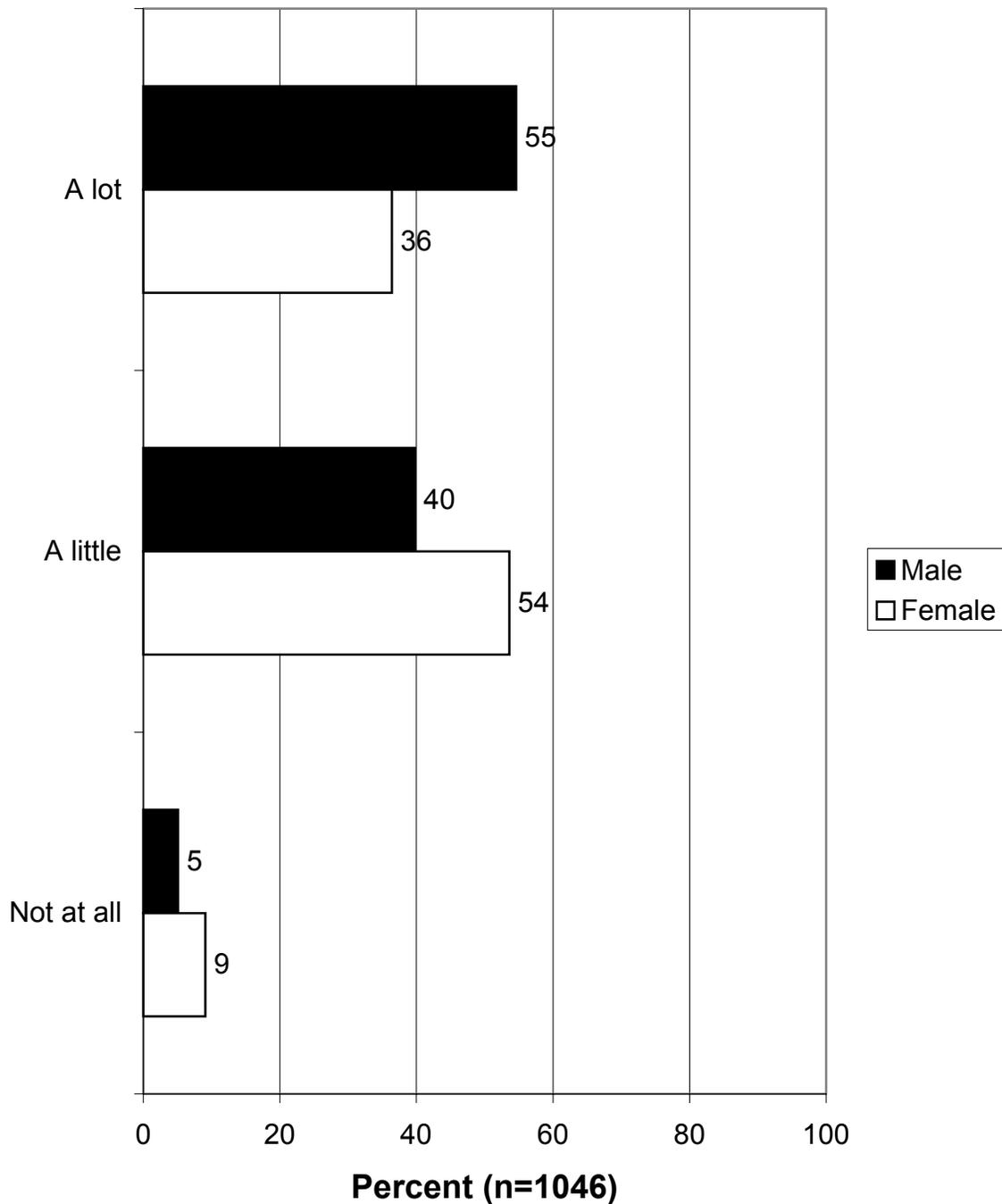
Q8. Cont'd. Activities participated in within the past 12 months. By Gender.



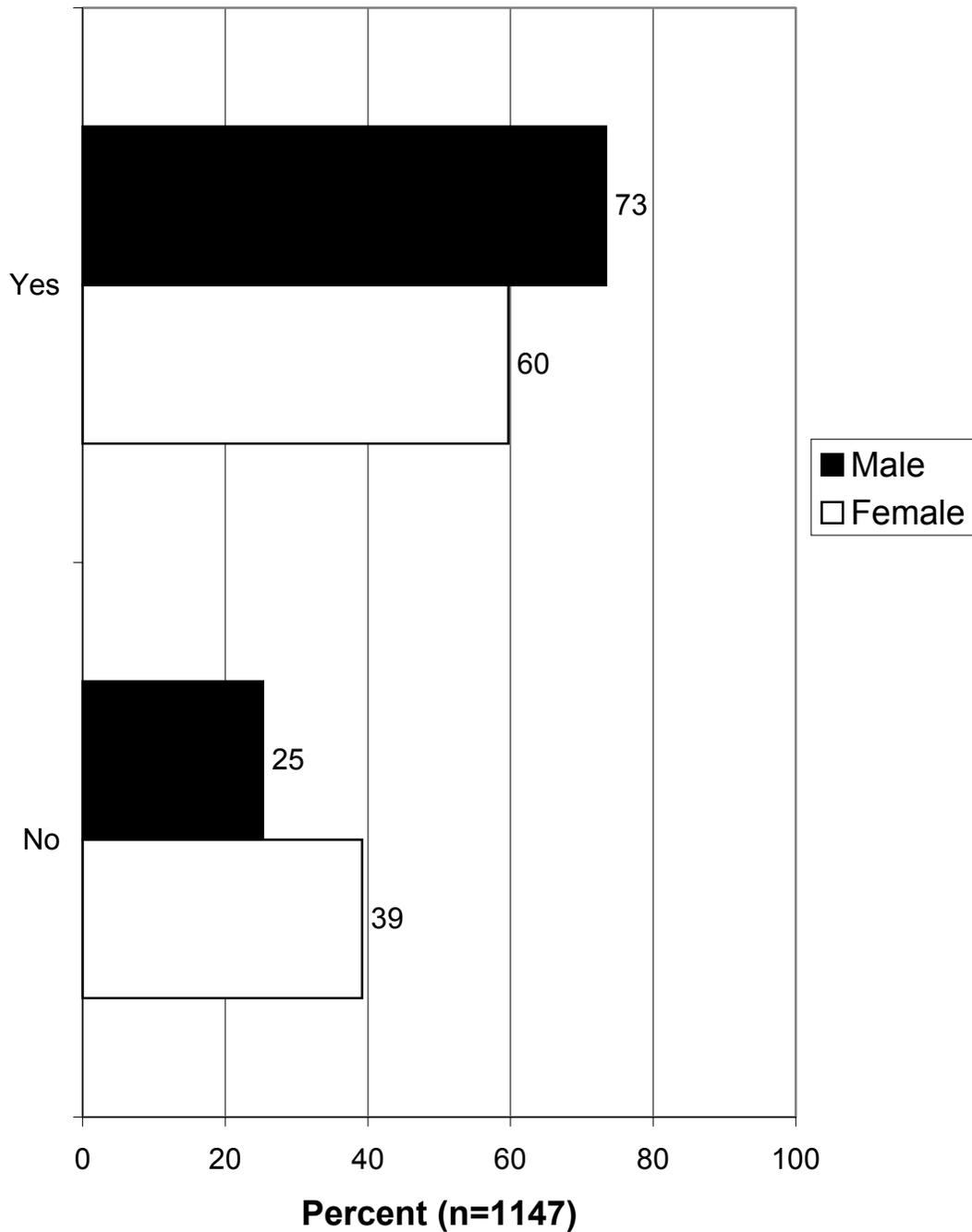
Q9. Have you ever gone fishing in your life? By Gender.



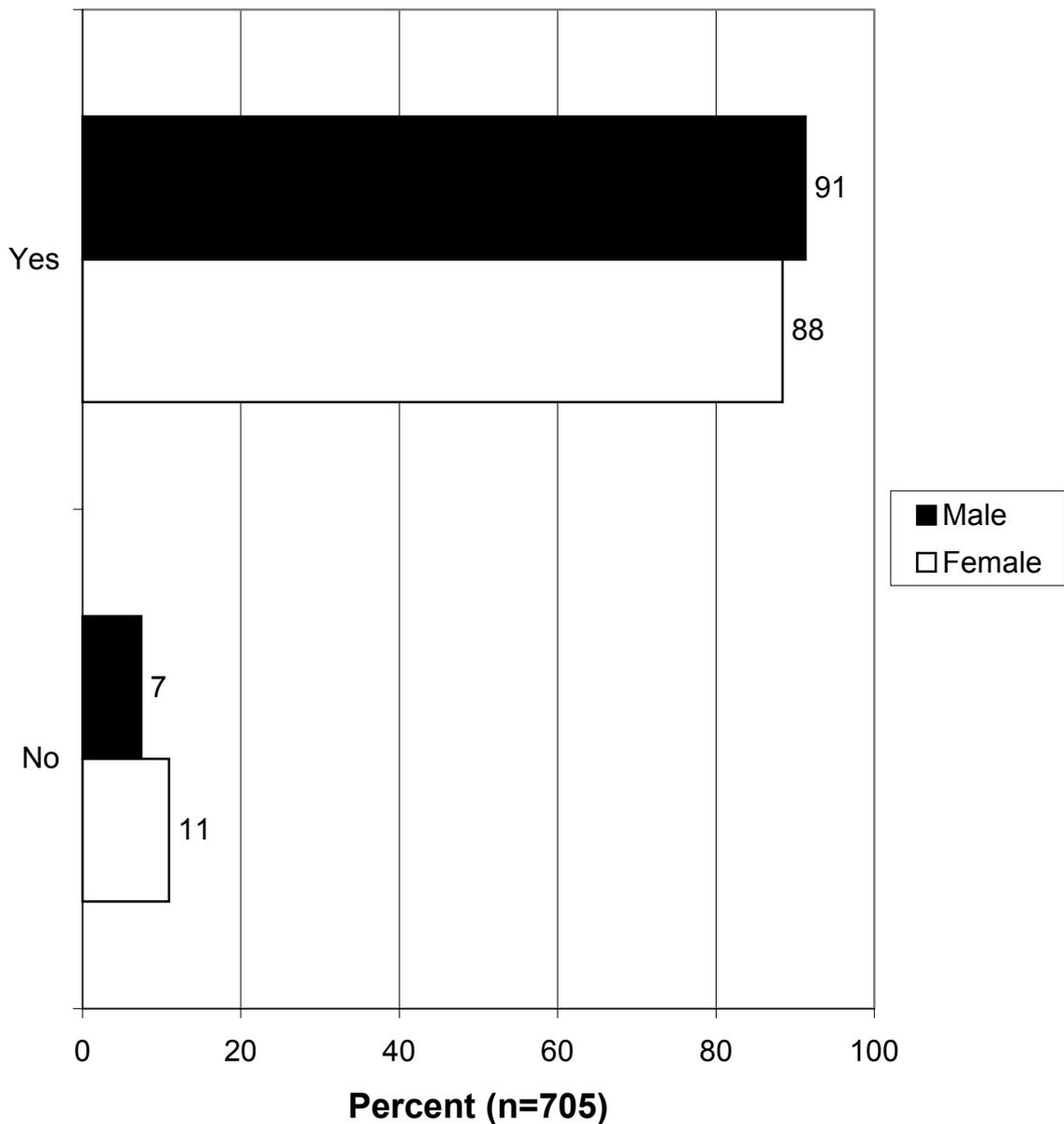
**Q10. Would you say you like fishing a lot, a little, or not at all? (asked of those who reported having gone fishing in their life).
By Gender.**



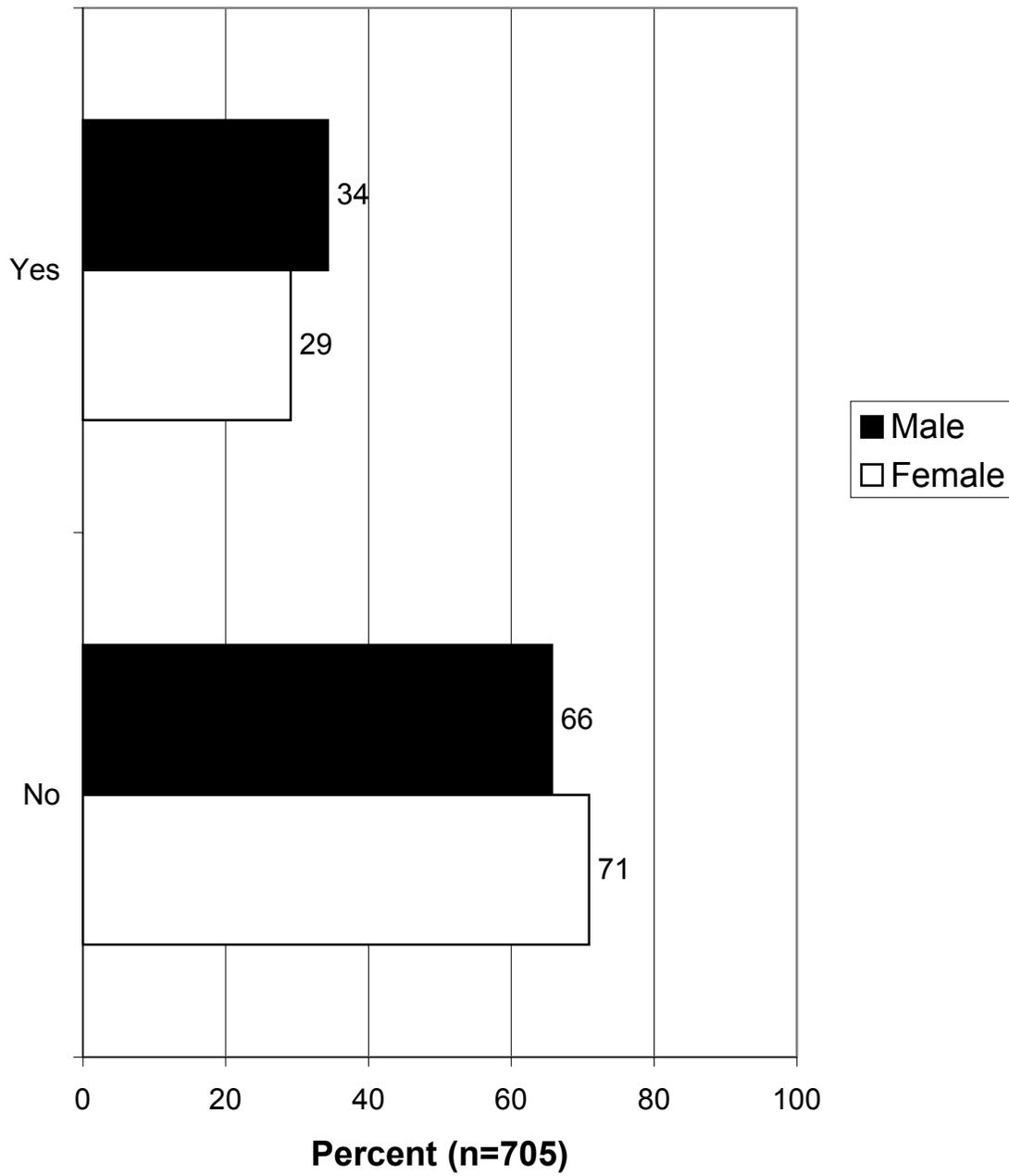
**Q11. Have you gone fishing within the past 12 months? (asked of those who reported having gone fishing in their life).
By Gender.**



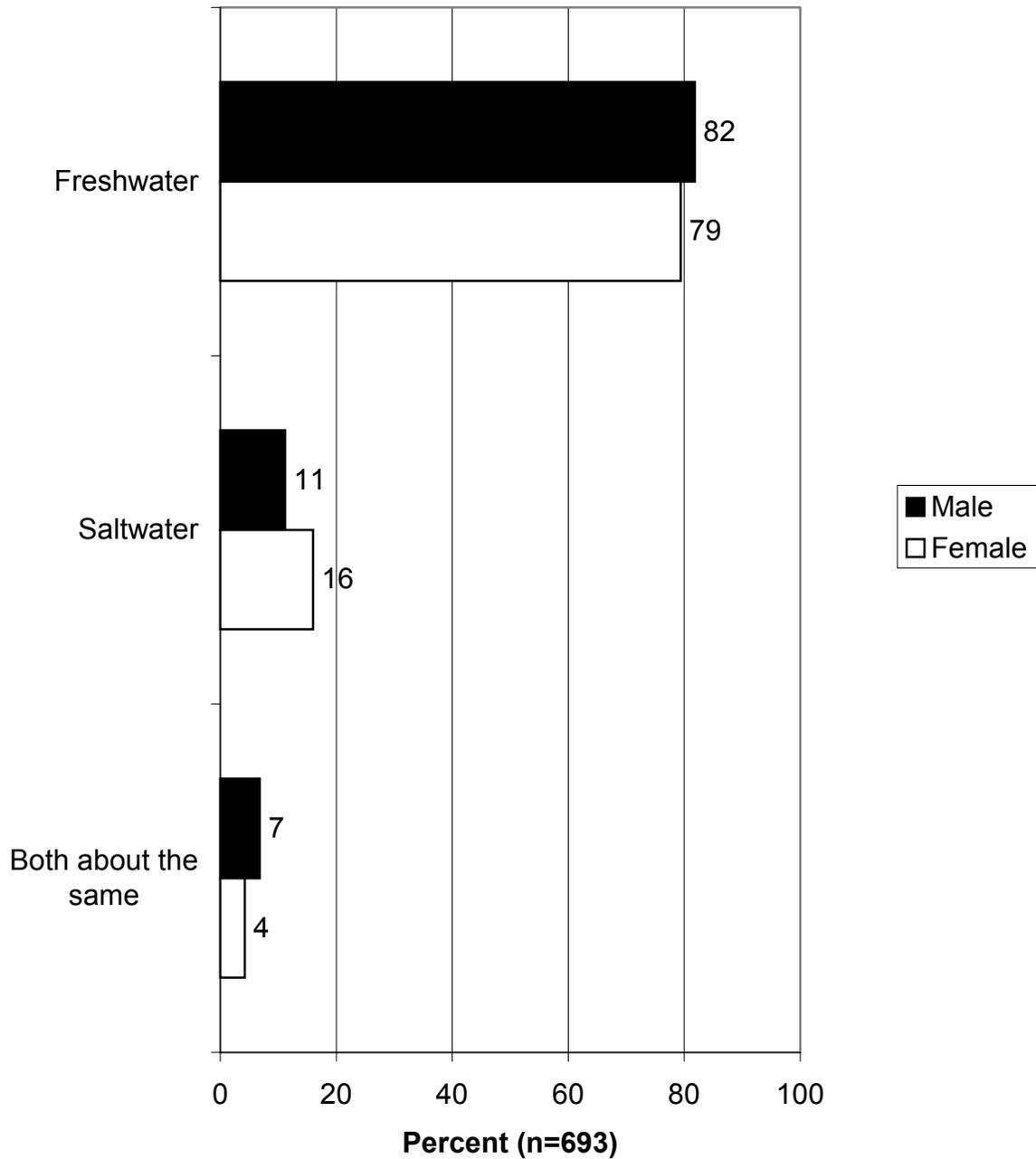
**Q12. Within the past 12 months, did you go fishing in freshwater, like in ponds, lakes, streams, or reservoirs? (asked of those who have fished in the last 12 months).
By Gender.**



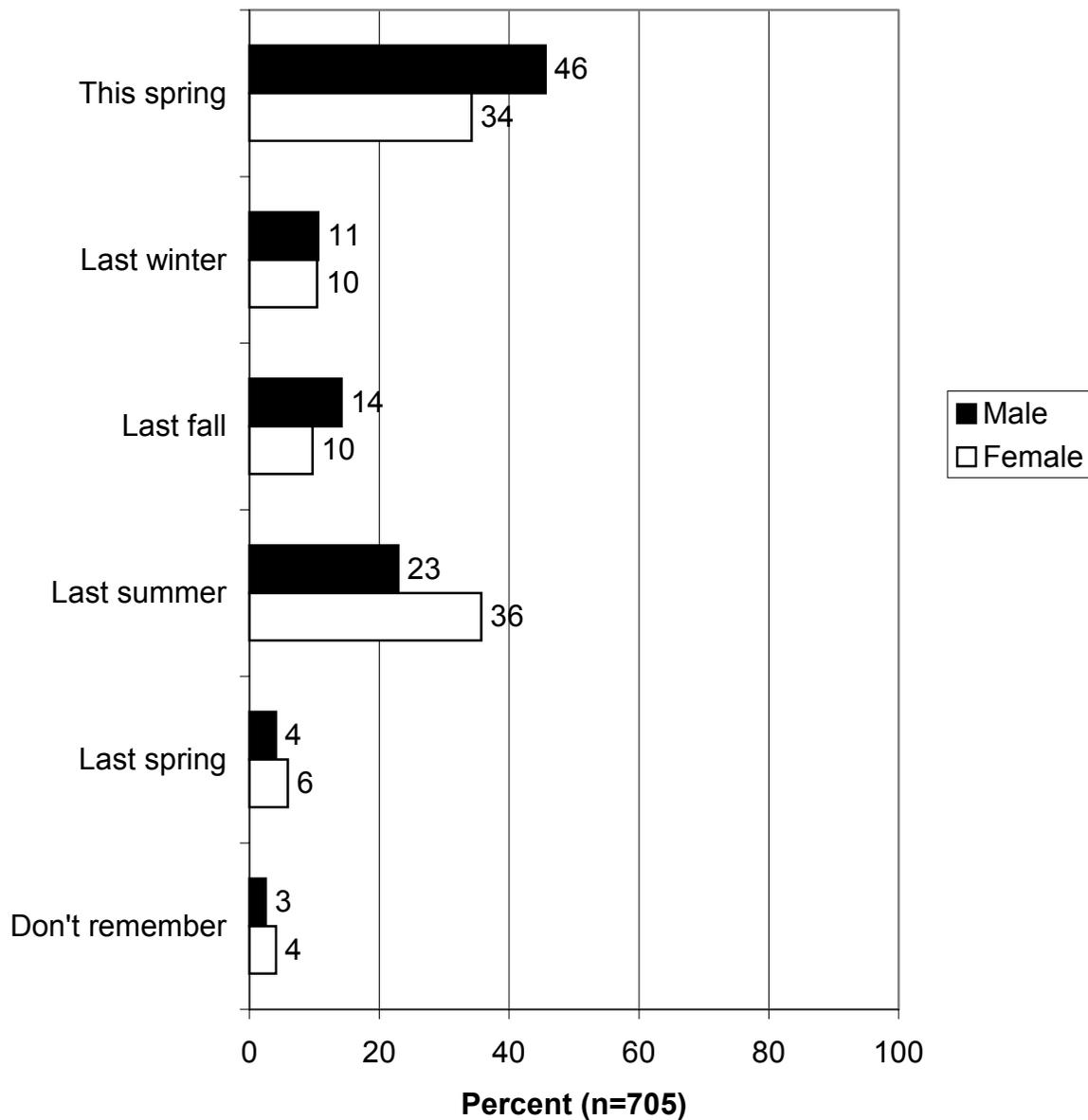
**Q13. Within the past 12 months, did you go fishing in saltwater, such as at the beach or in the ocean? (asked of those who have fished in the last 12 months).
By Gender.**



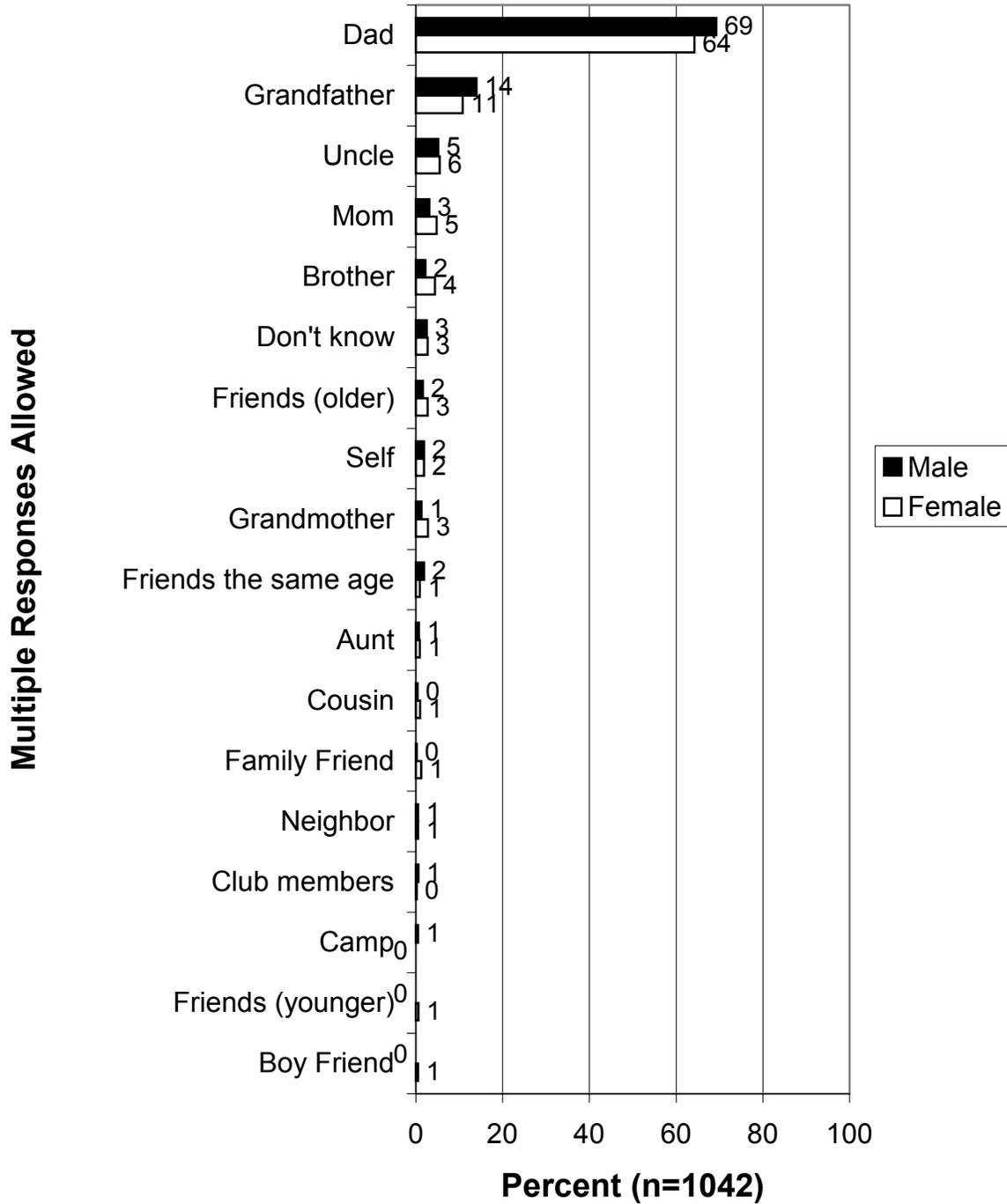
Q14. Which do you do more: Fish in freshwater or in saltwater, or do you do both about the same? (asked of those who either saltwater or freshwater fished in the last 12 months). By Gender.



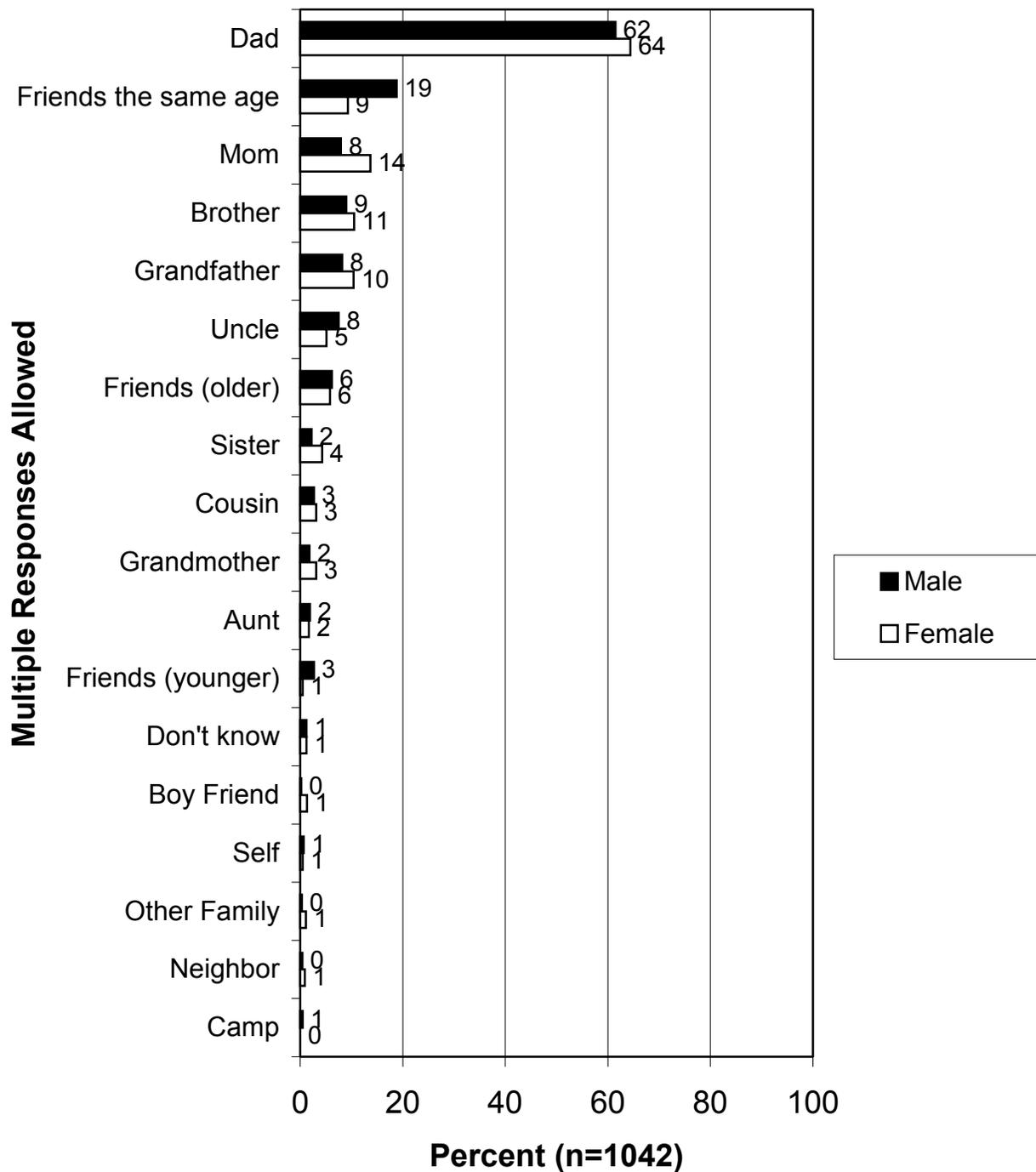
**Q15. When was the last time you went fishing?
Did you go this spring, this past winter, last fall,
last summer or last spring? (asked of those
who have fished in the last 12 months).
By Gender.**



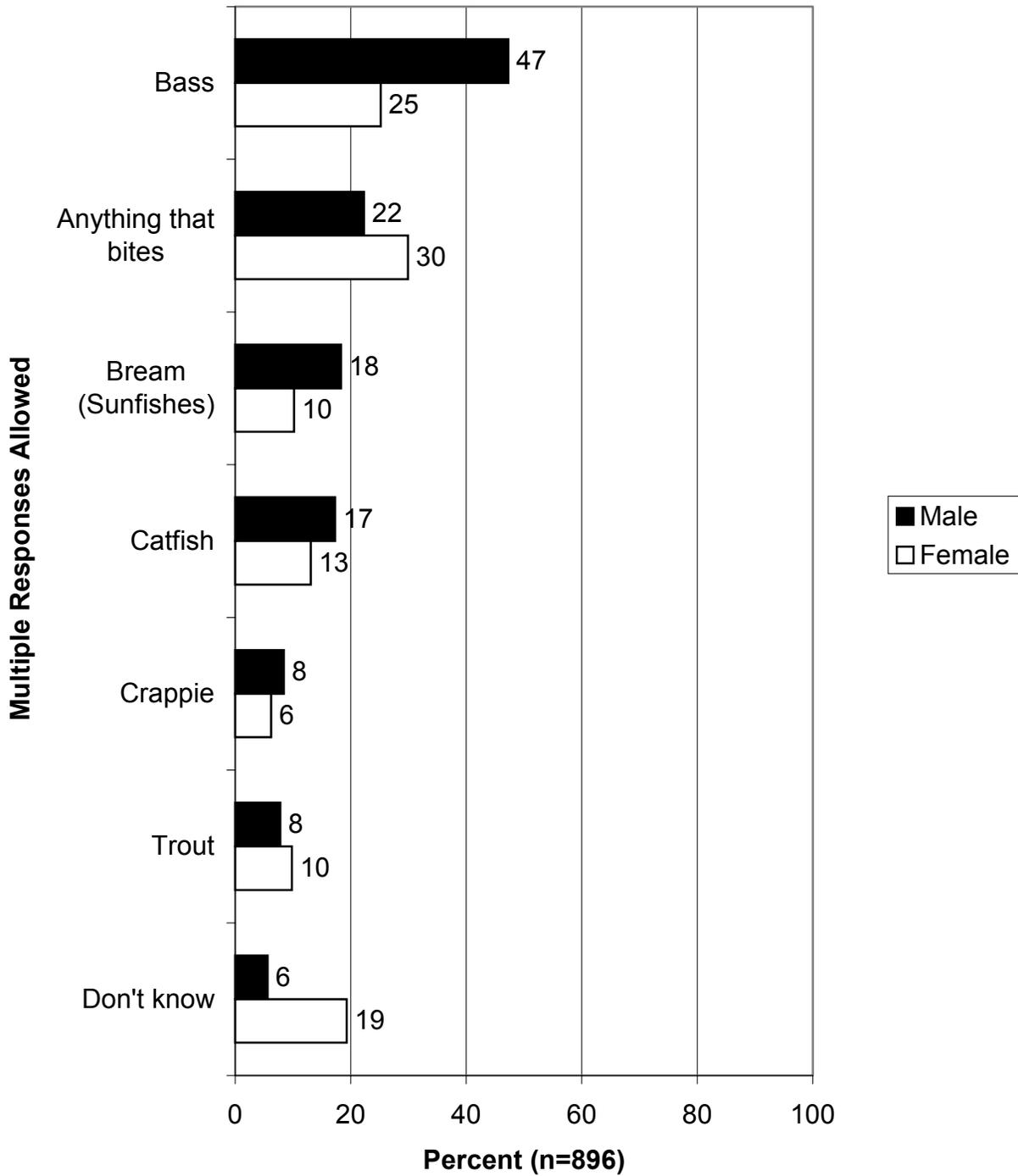
**Q18. Who FIRST taught you how to fish?
(asked of those who reported having gone
fishing in their life). By Gender.**



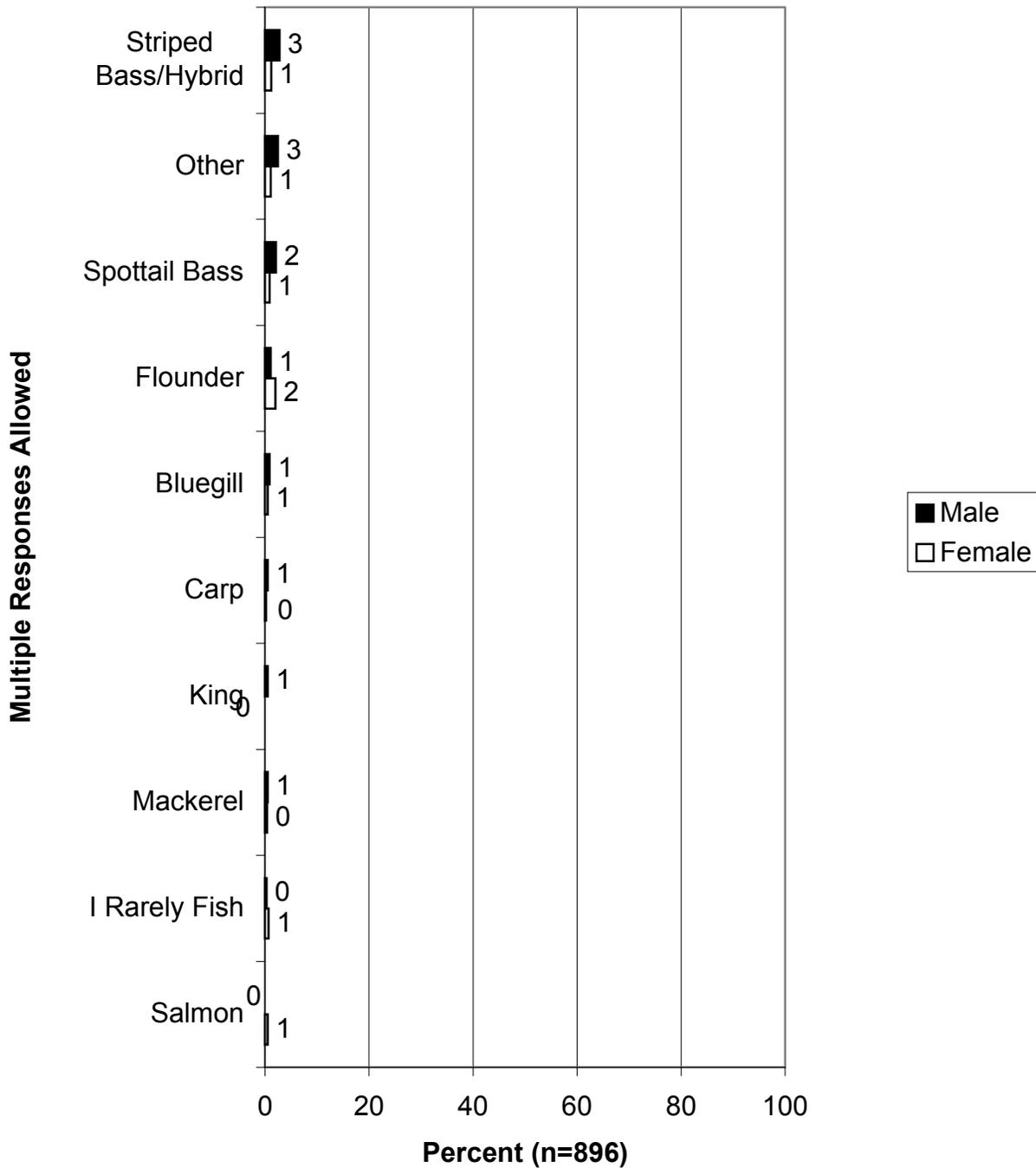
**Q21. WHO do you usually go fishing with? (asked of those who reported having gone fishing in their life).
By Gender.**



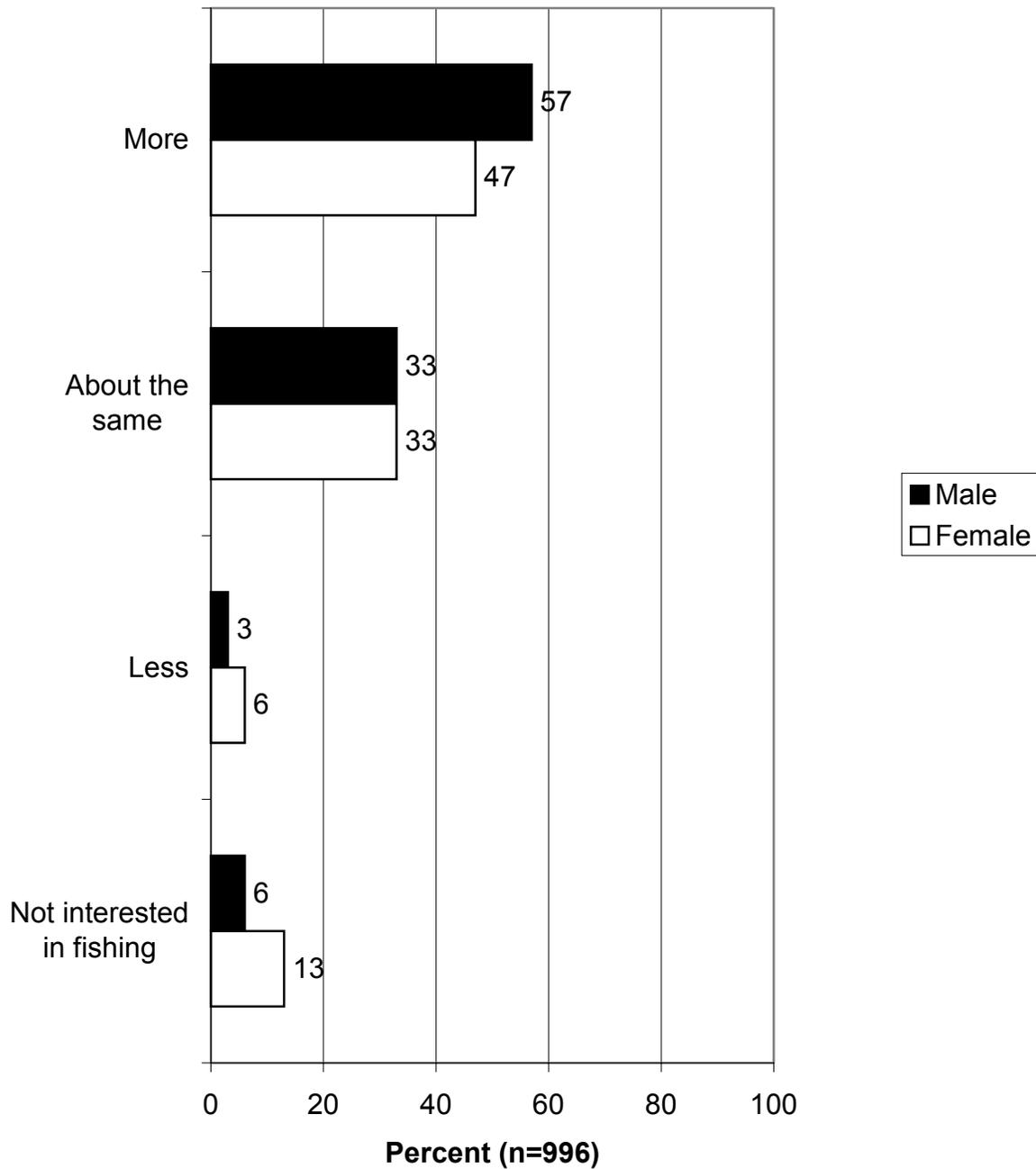
**Q24. What kind of fish do you usually fish for?
(asked of those who reported having gone
fishing in their life). By Gender.**



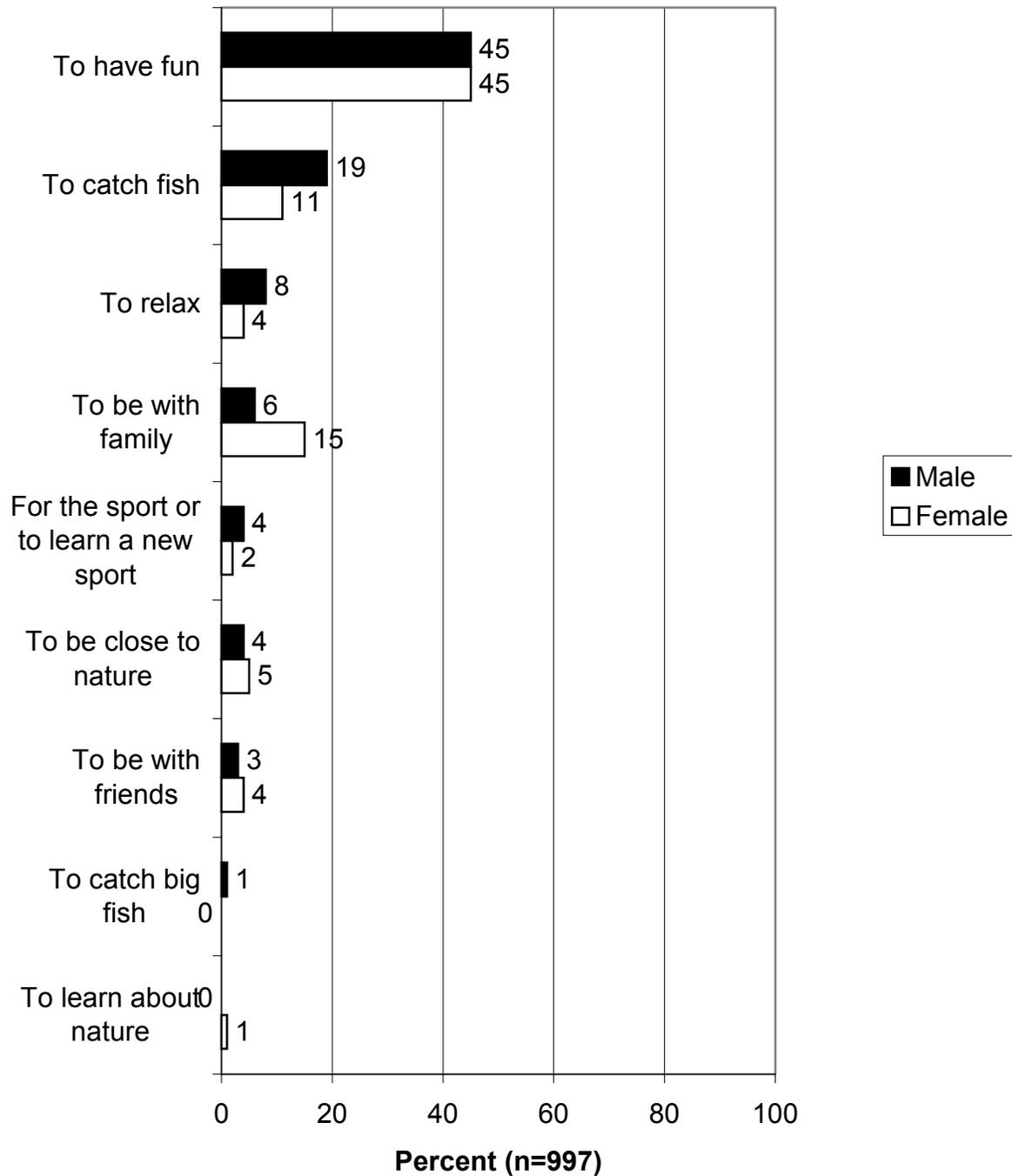
Q24. Cont'd. What kind of fish do you usually fish for? (asked of those who reported having gone fishing in their life). By Gender.



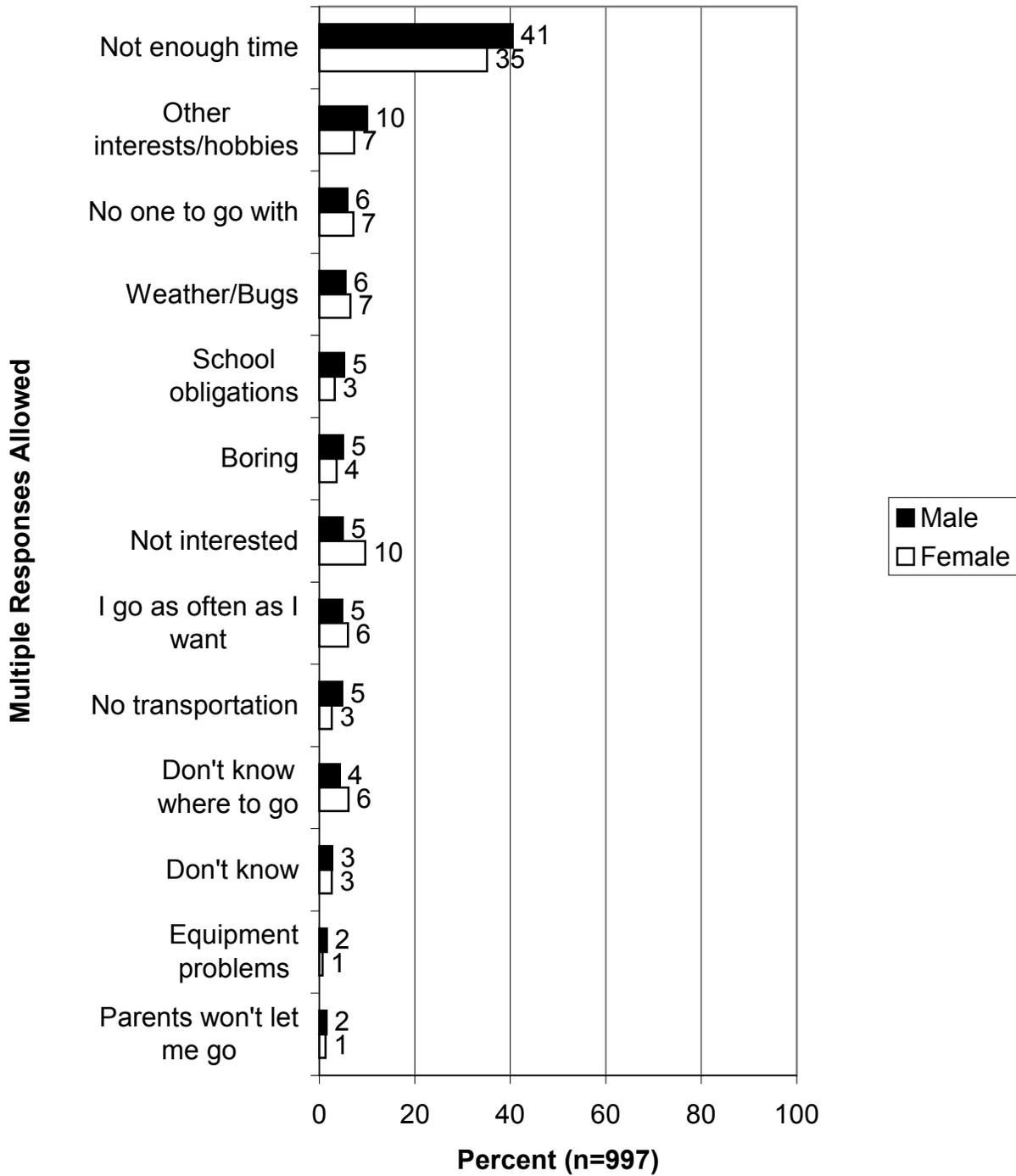
Q26. If you could change how much you go fishing, would you go fishing more, about the same, or less? Or are you not interested in going fishing? (Asked of all respondents) By Gender.



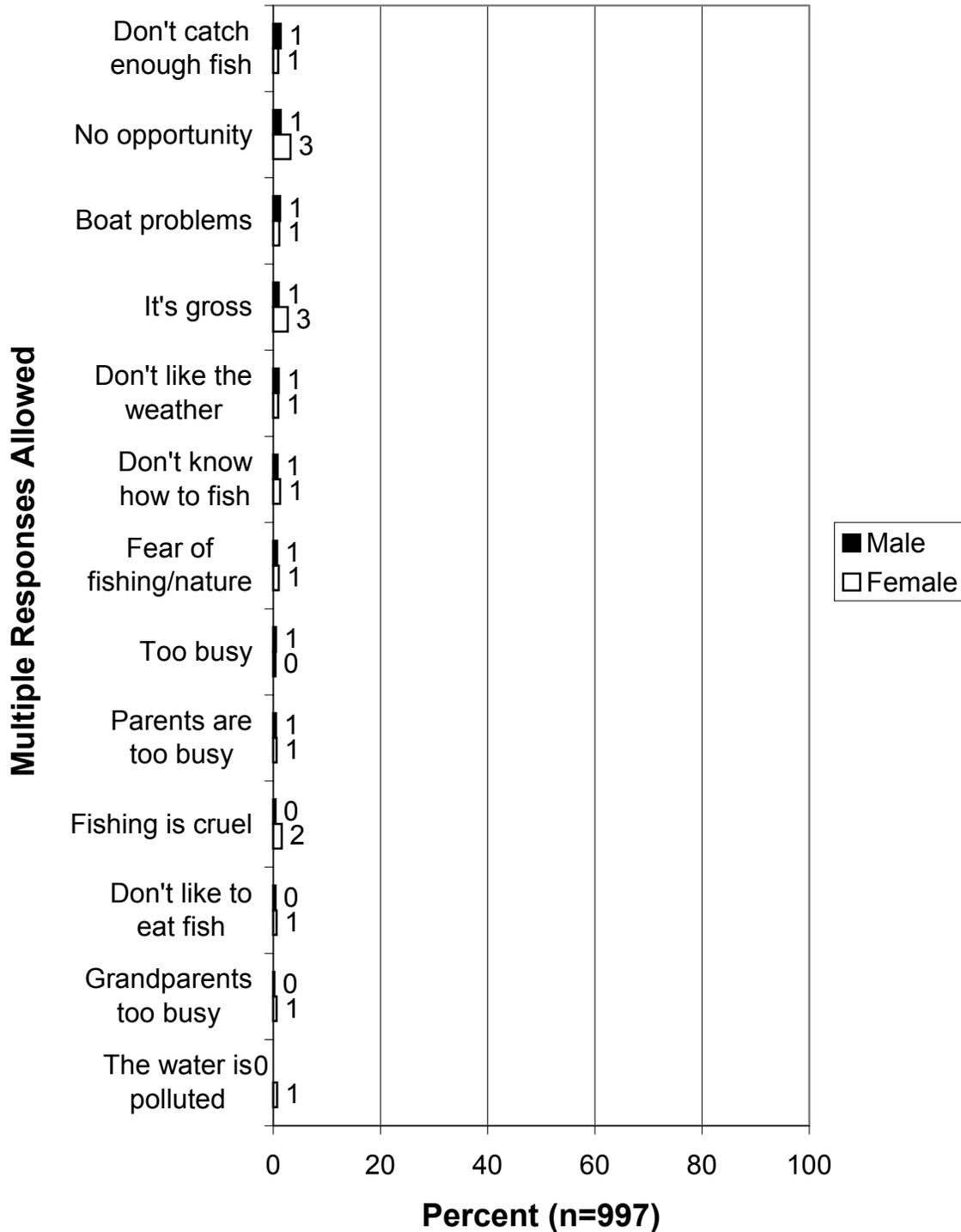
Q27. What is the main reason why you would go fishing? (unprompted: categories not read. respondent's single most important reason) By Gender.



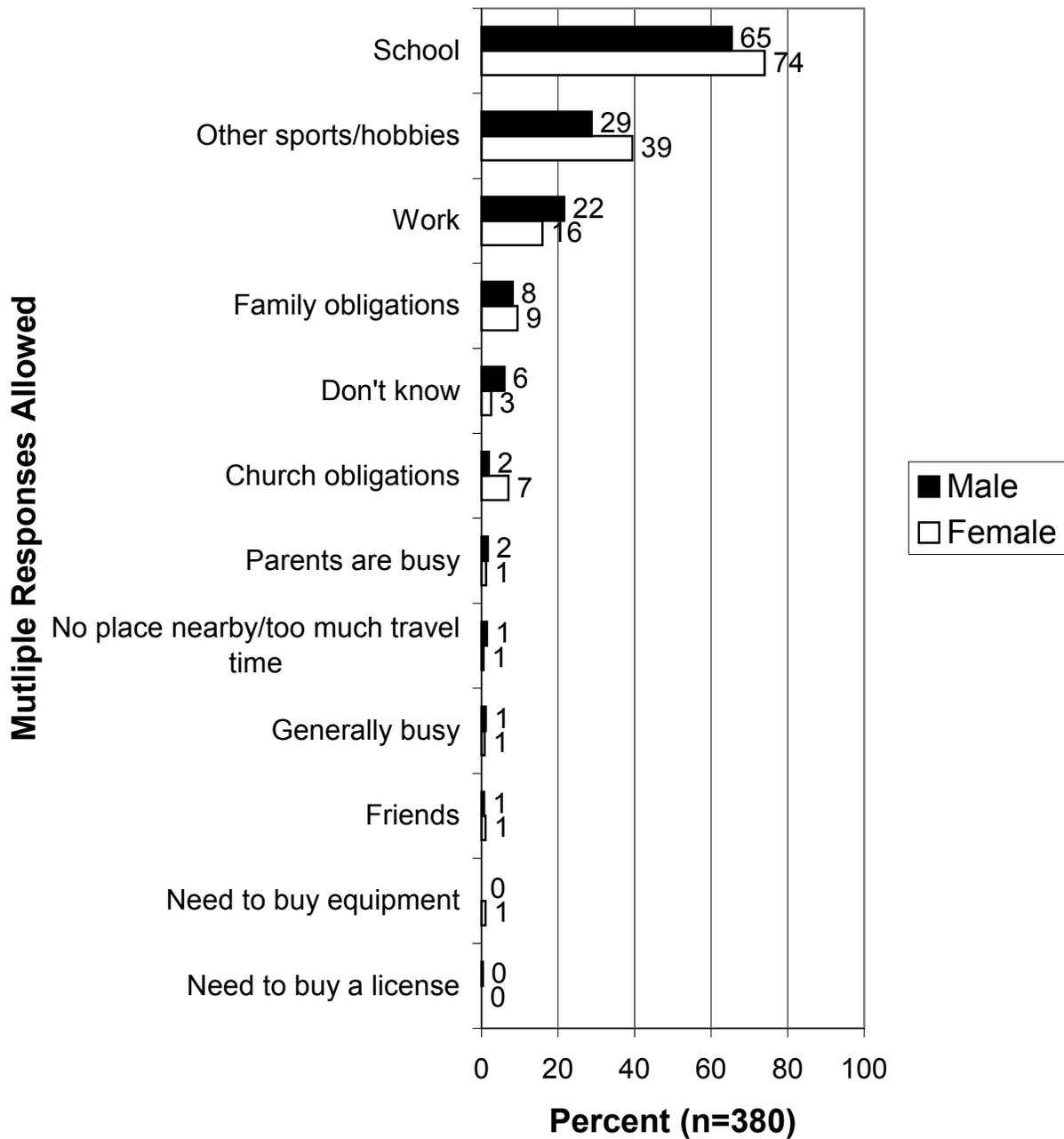
Q29. In general, what are some of the reasons why you don't go fishing more often? By Gender.



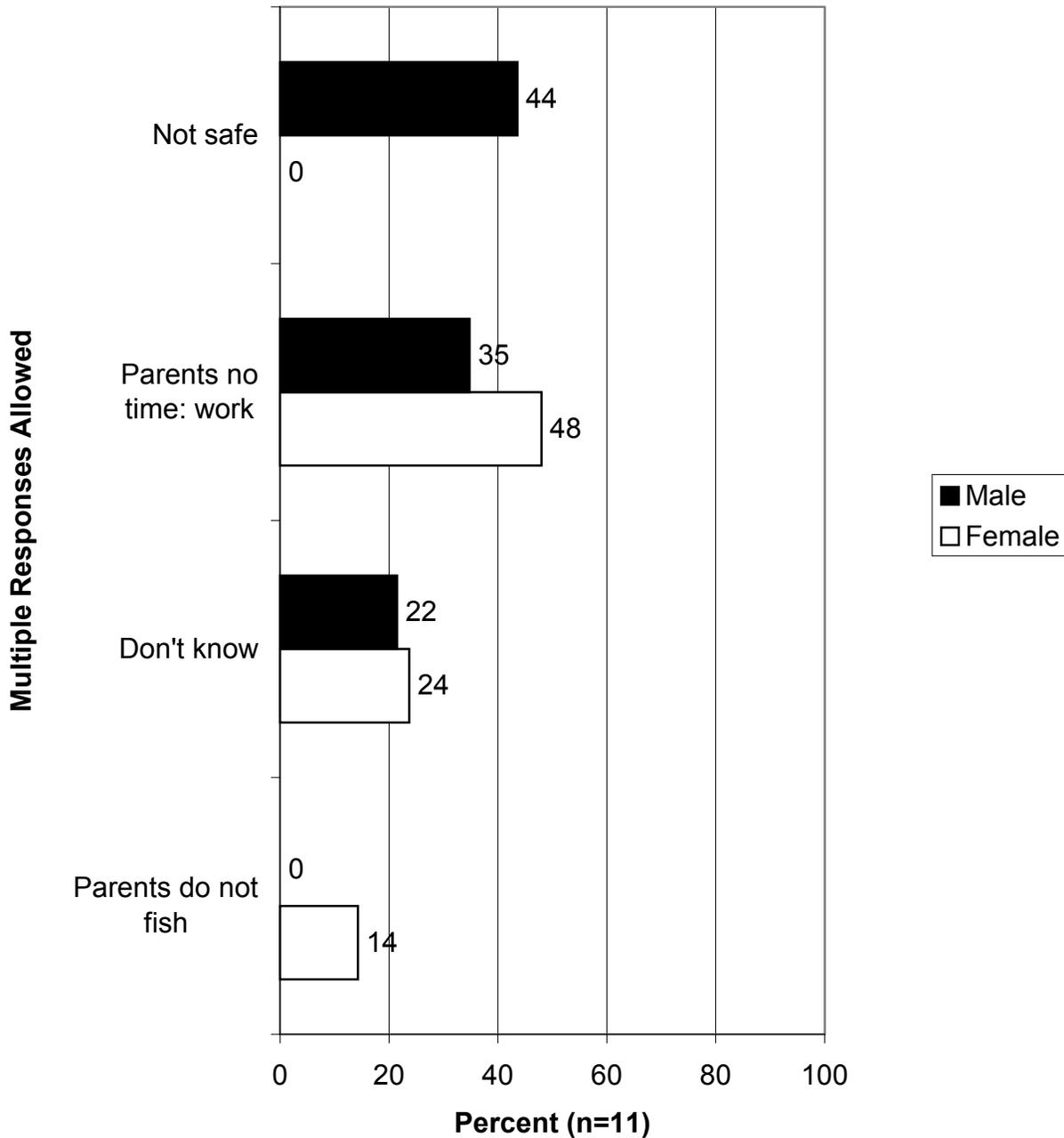
Q29. Cont'd. In general, what are some of the reasons why you don't go fishing more often? By Gender.



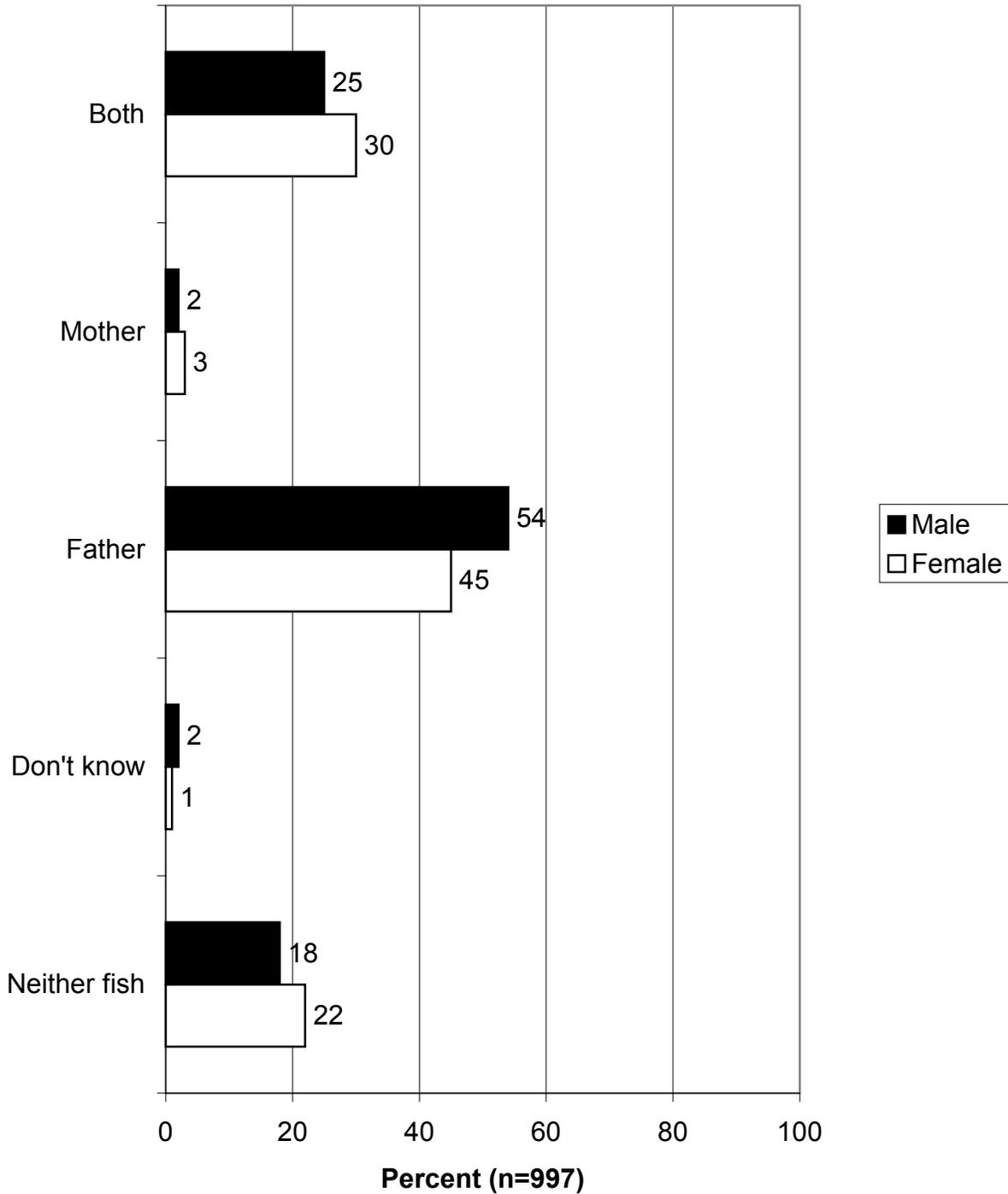
**Q32. What are the specific reasons you don't have enough time to go fishing?
(asked of those who reported "not enough time" as a reason they do not go fishing). By Gender.**



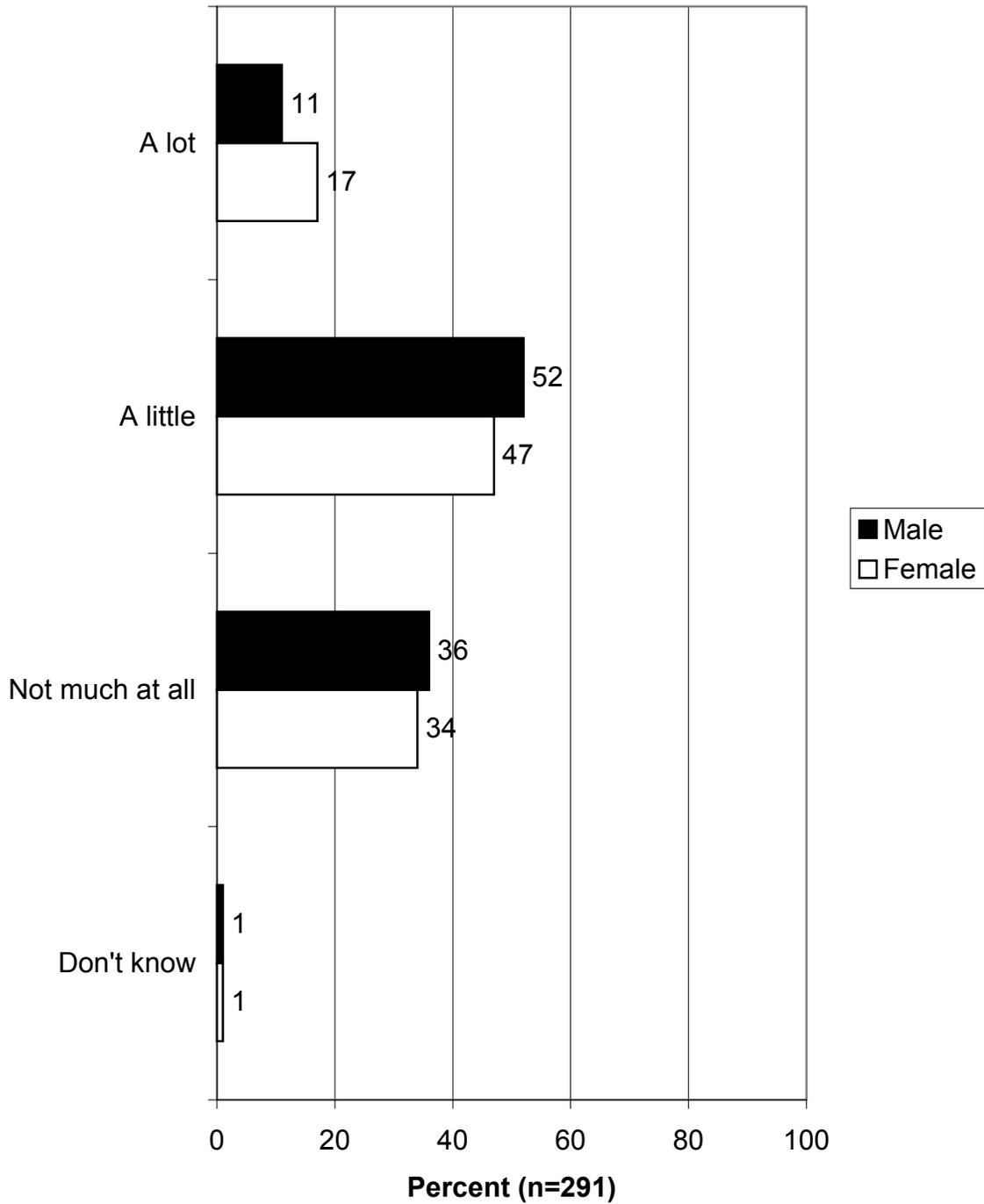
Q35. You said your parents would not let you go fishing? What, specifically, are the reasons for this? (asked of those who's "parents will not let them go" fishing). By Gender.



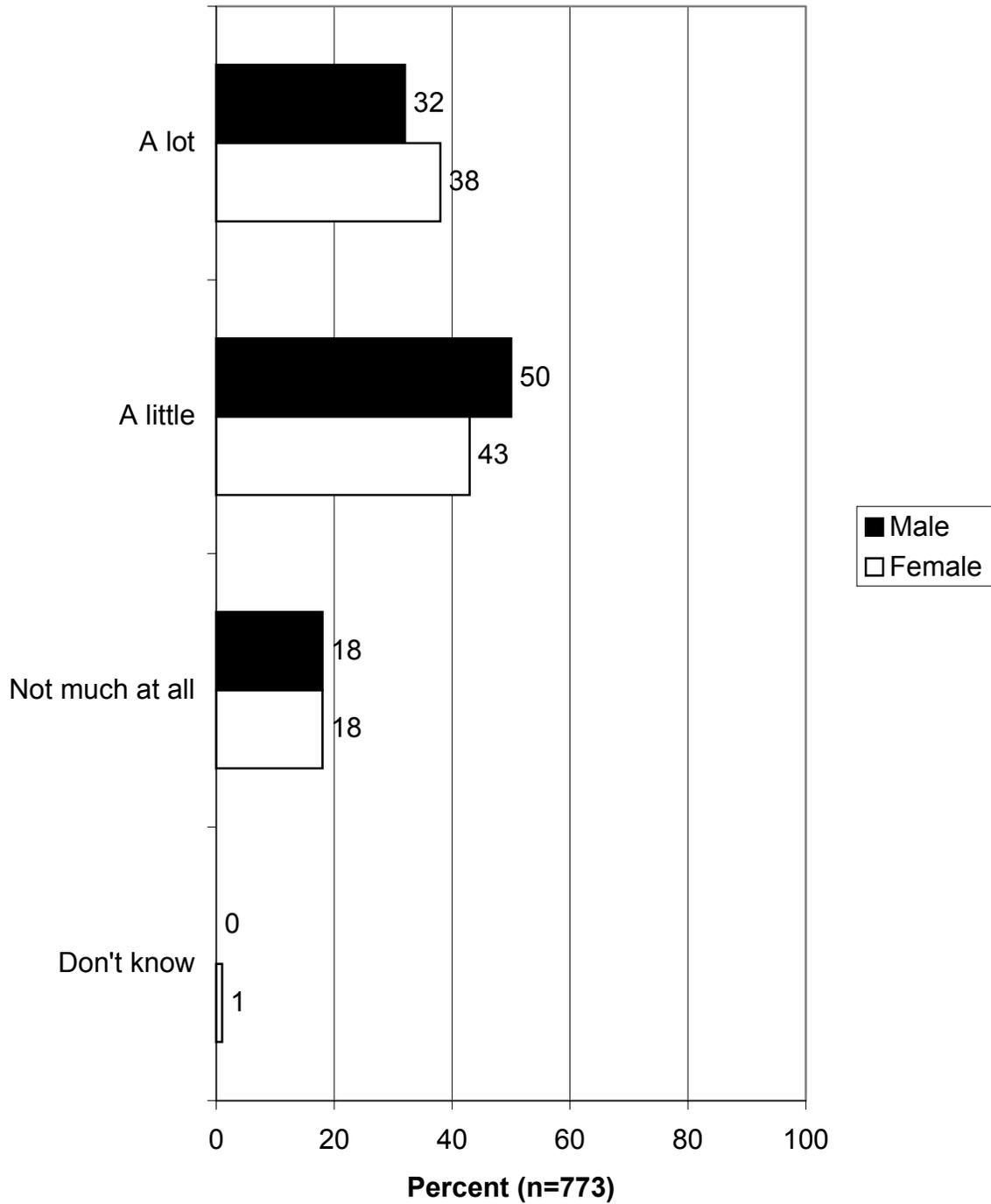
**Q37. Do both of your parents fish, or does only your mother or your father fish?
By Gender.**



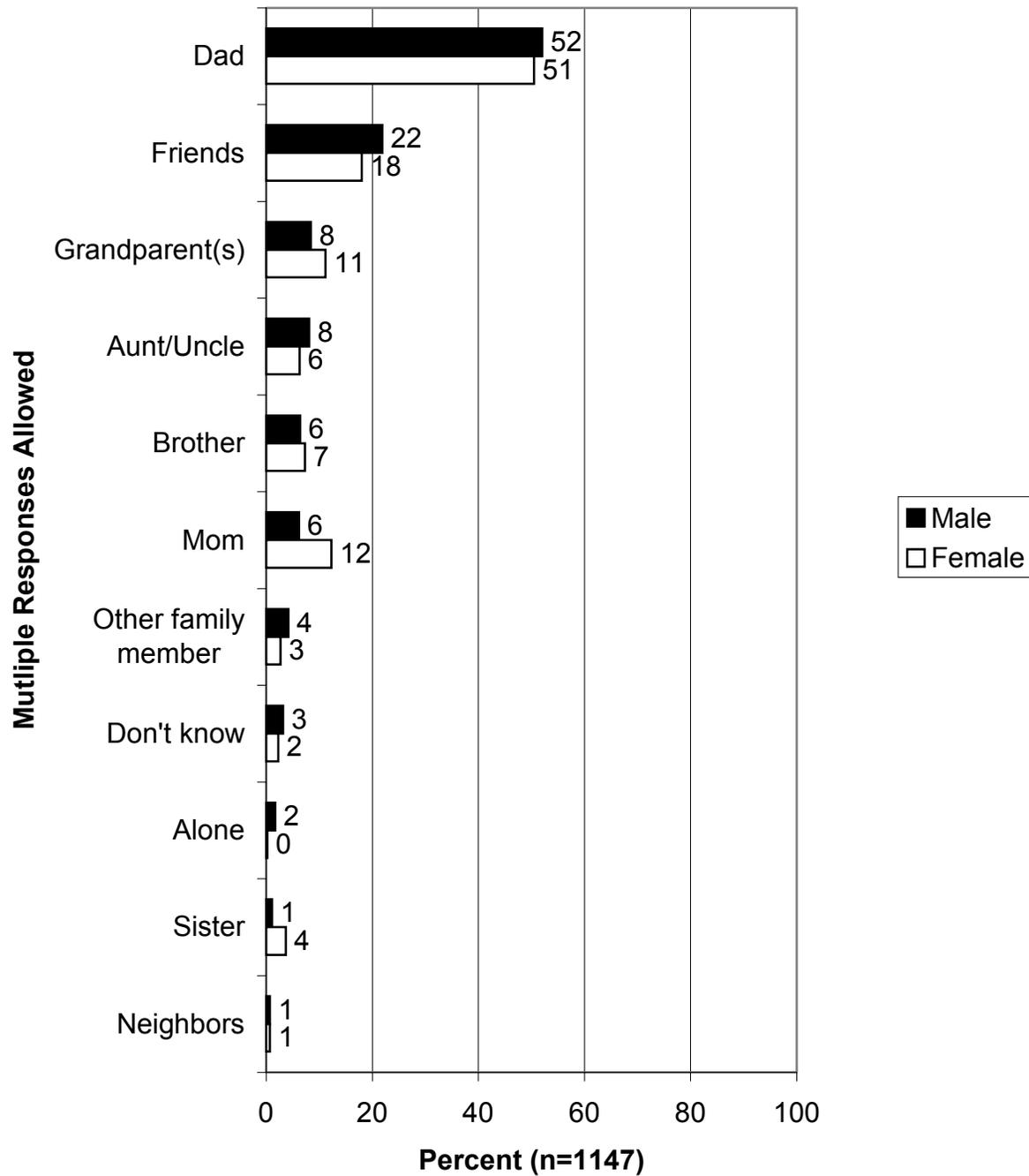
Q38. Does your mom fish a lot, a little, or not much at all? (asked of those whose mother fishes). By Gender.



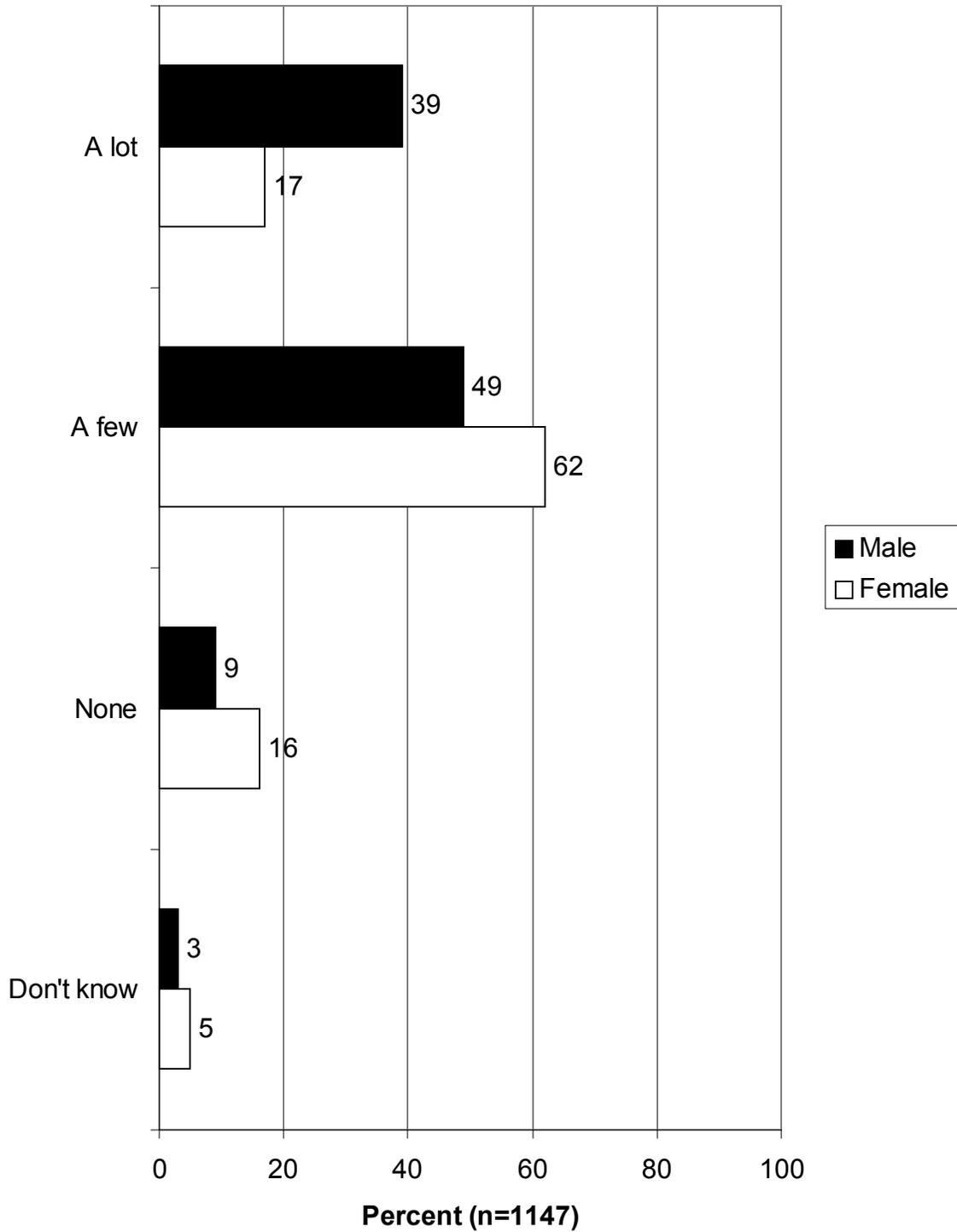
**Q39. Does your dad fish a lot, a little, or not much at all? (asked of those whose dad fishes).
By Gender.**



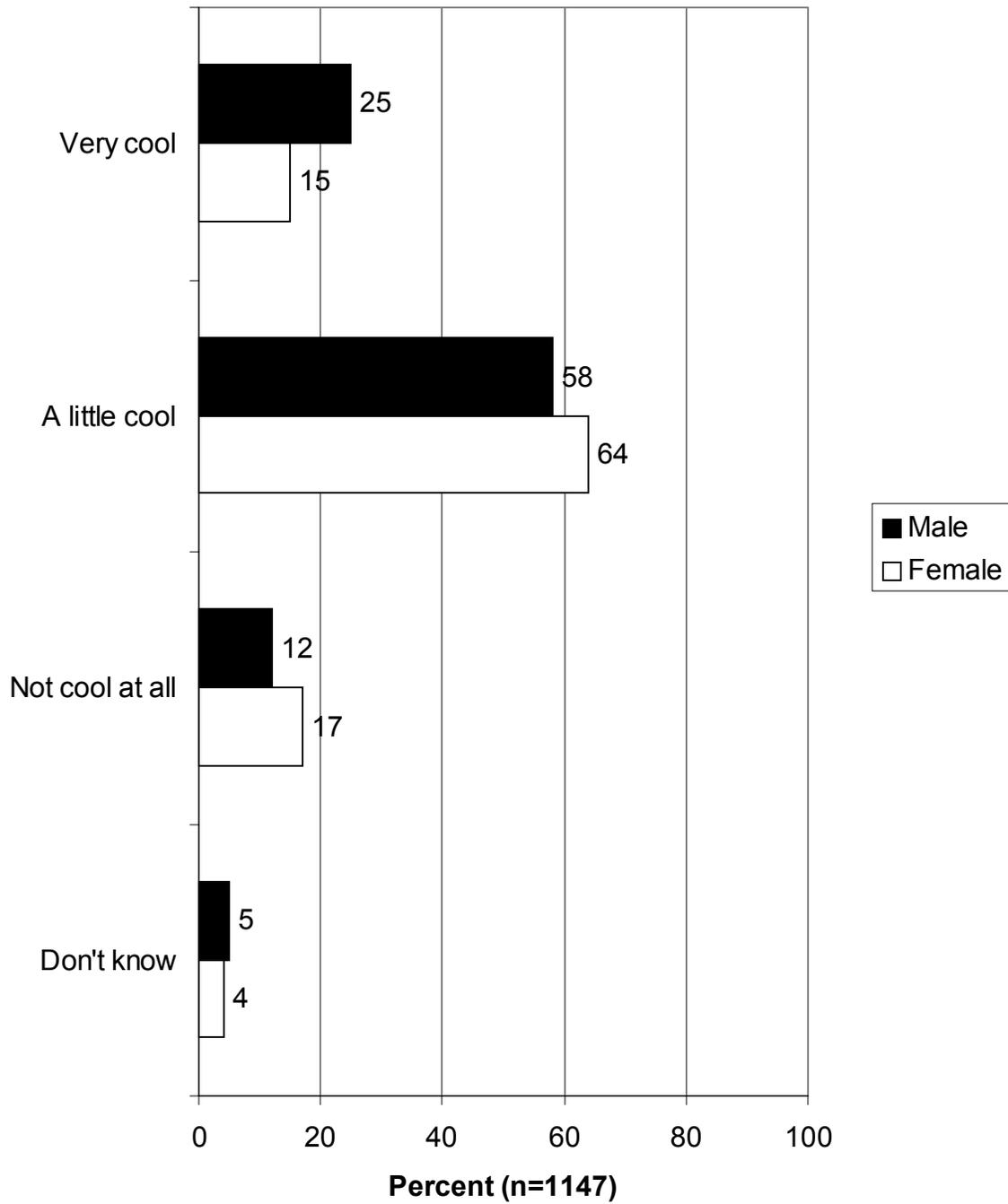
**Q41. Considering everyone you could go fishing with, who would you most like to go fishing with?
By Gender.**



Q43. Would you say that a lot, a few, or none of your friends fish? By Gender.



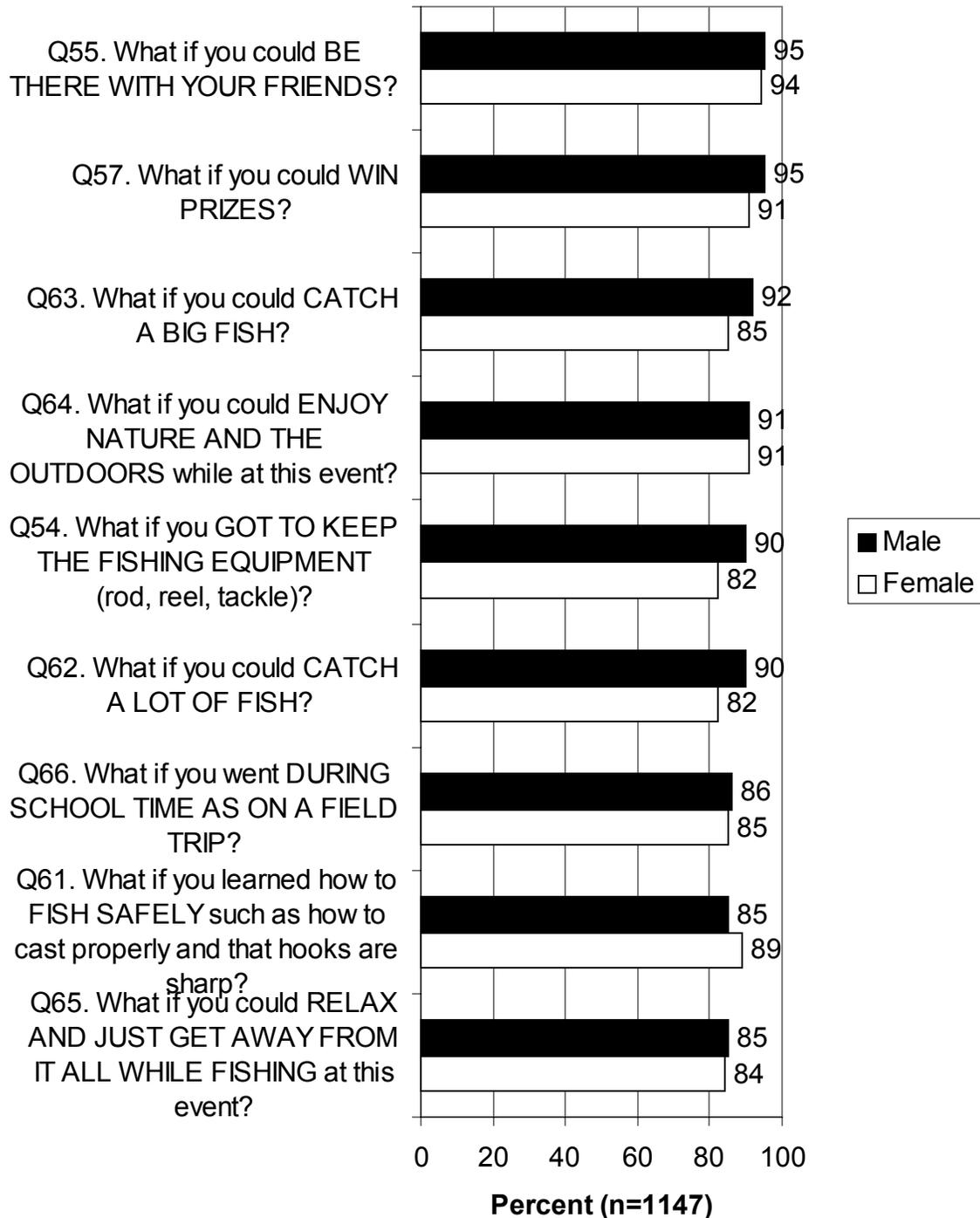
Q44. How cool do you think kids your age think fishing is? Is it very cool, a little cool, or not cool at all? By Gender.



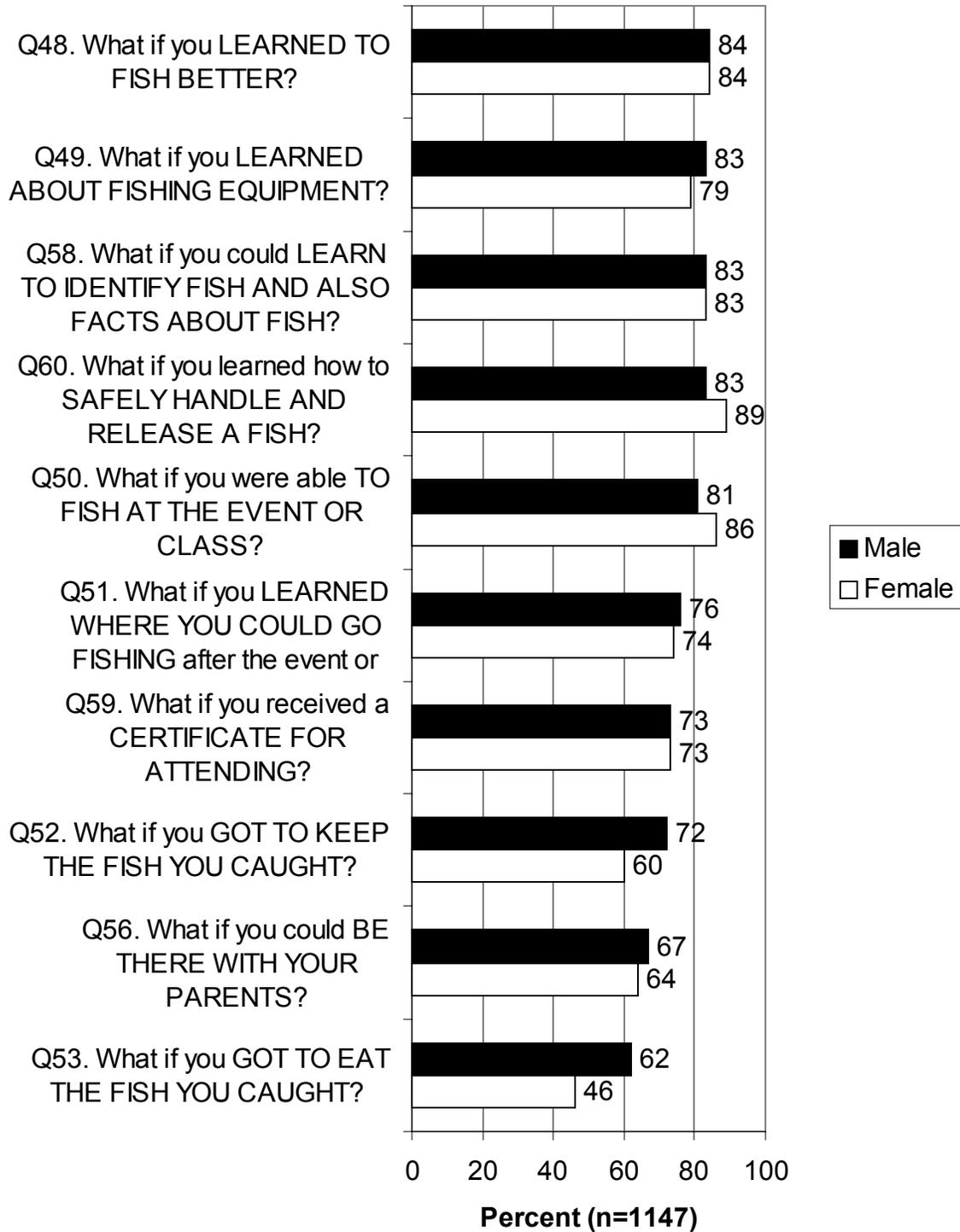
Q46. Now, I am going to read you a list of different types of fishing and I would like to know if you are interested in participating in any of these activities. Are you interested in...? By Gender.



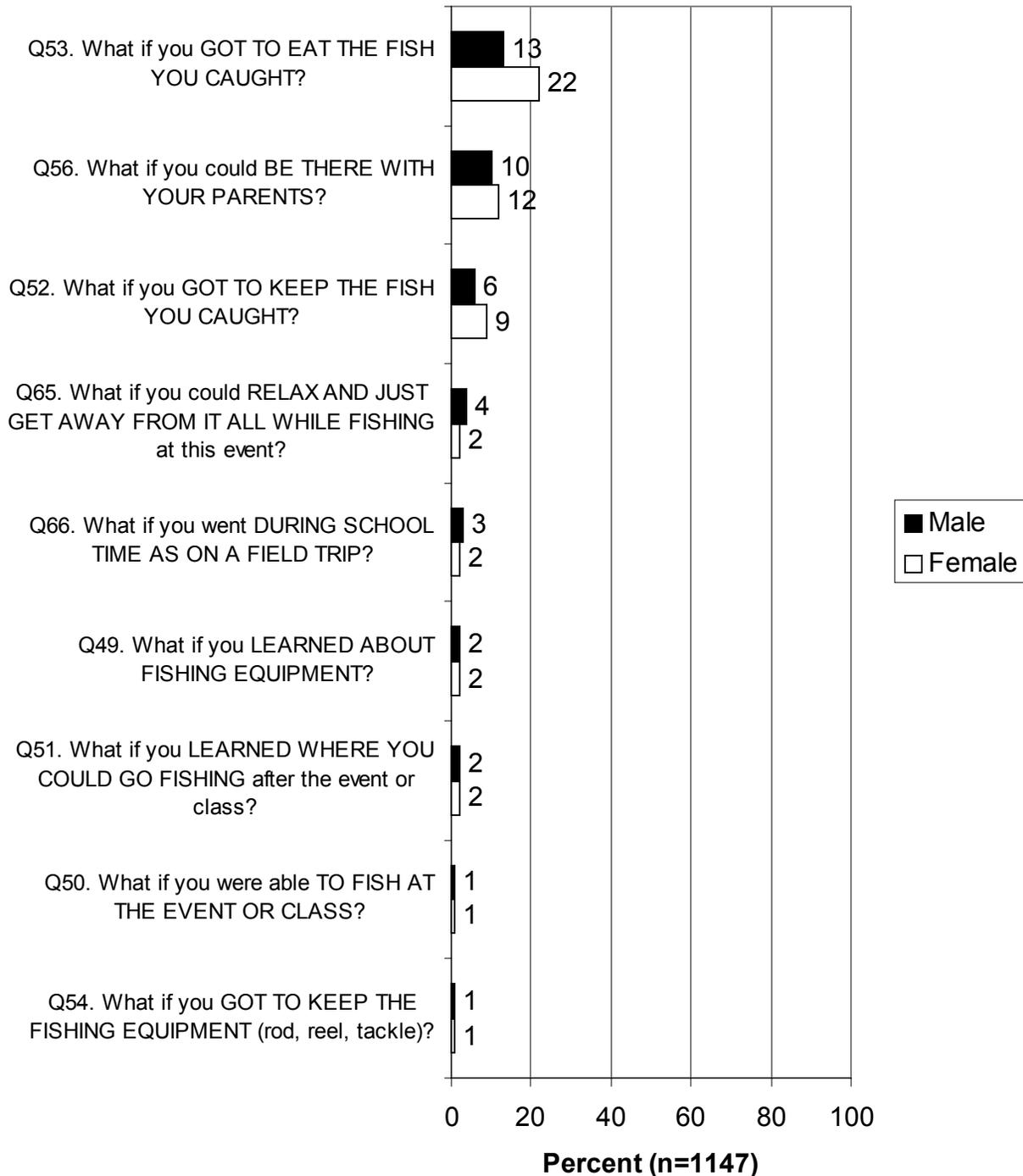
**Q48-66. Would the following make the fishing event or class BETTER.
By Gender.**



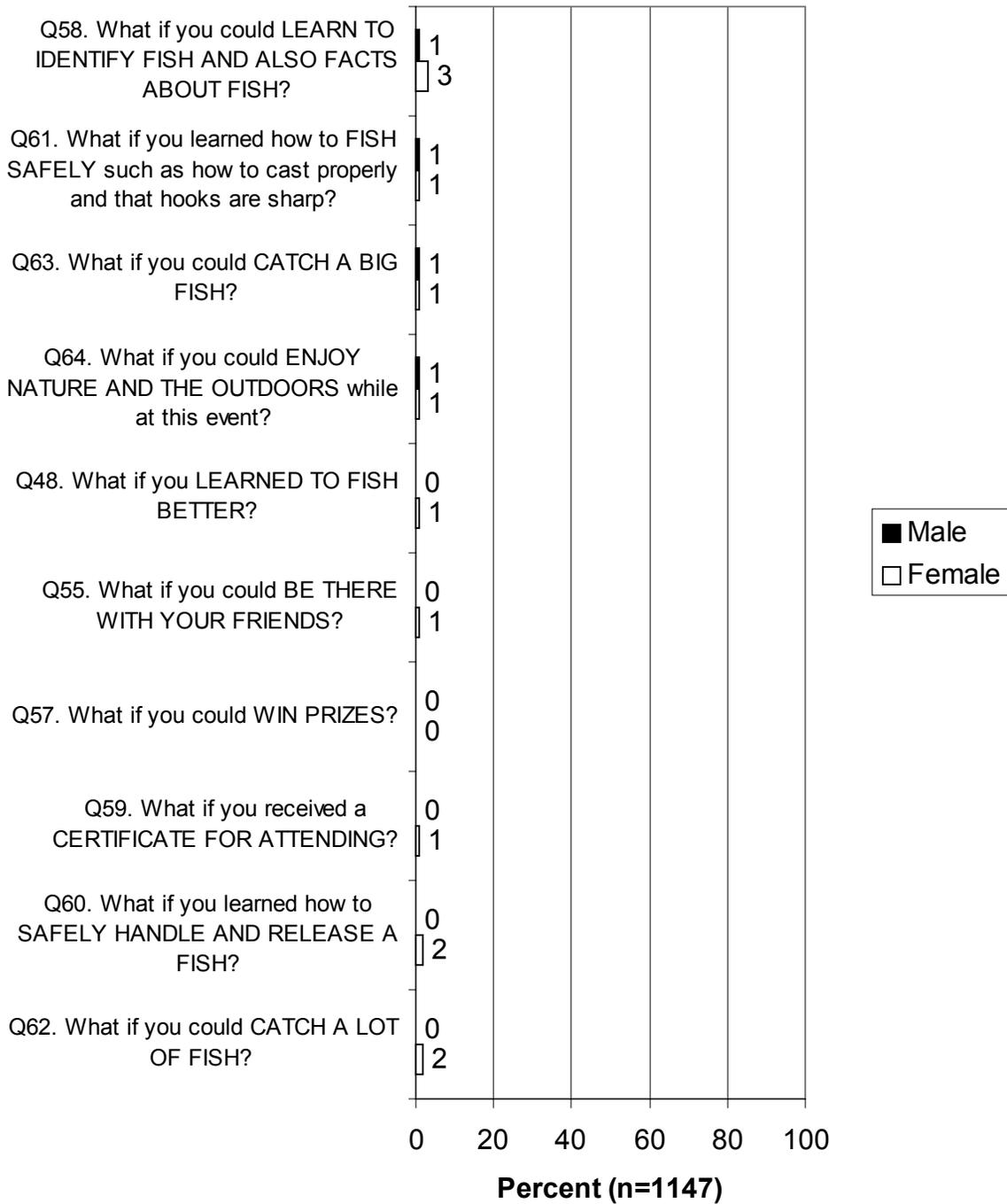
Q48-66. Cont'd. Would the following make the fishing event or class BETTER. By Gender.



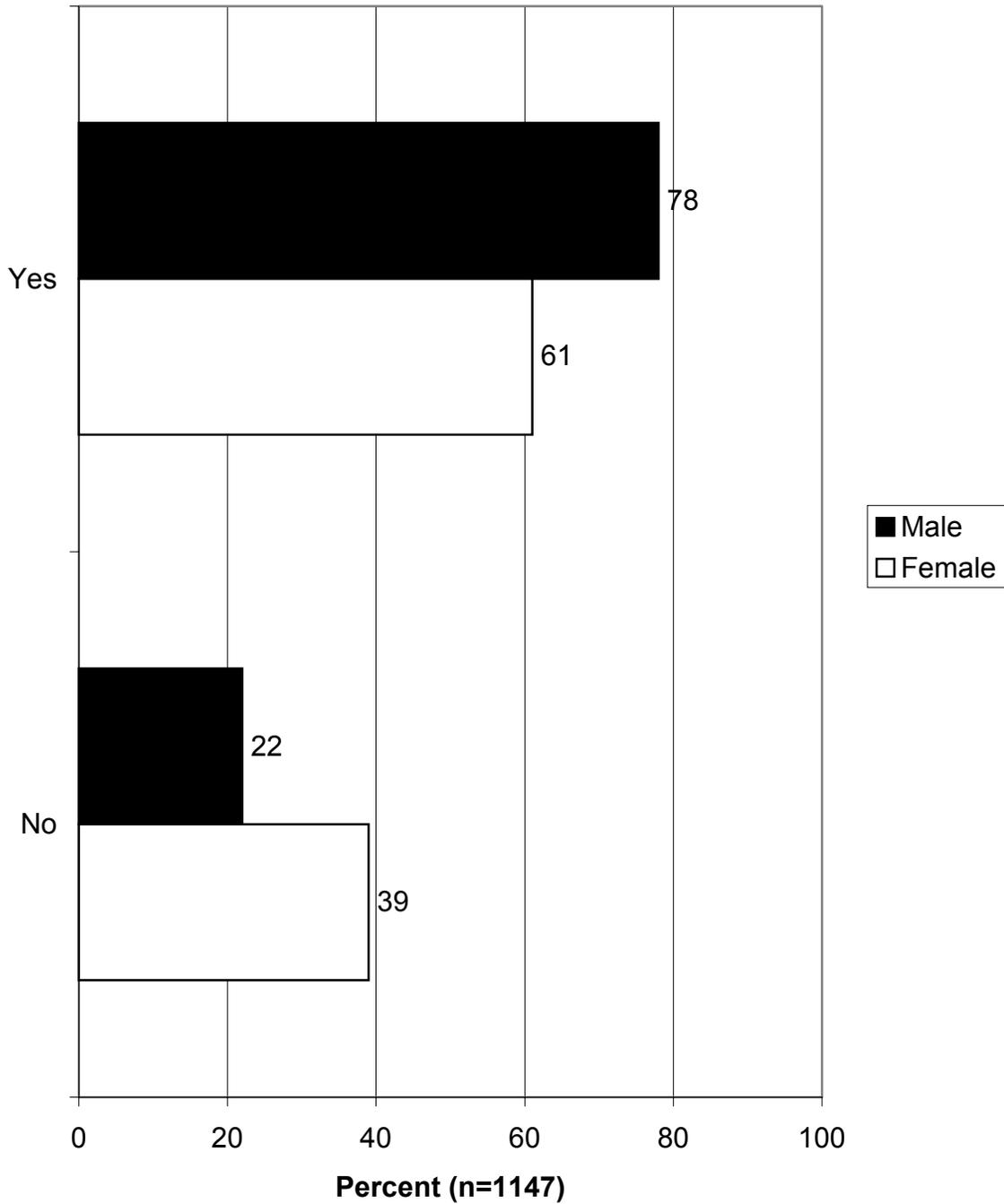
**Q48-66. Would the following make the fishing event or class WORSE.
By Gender.**



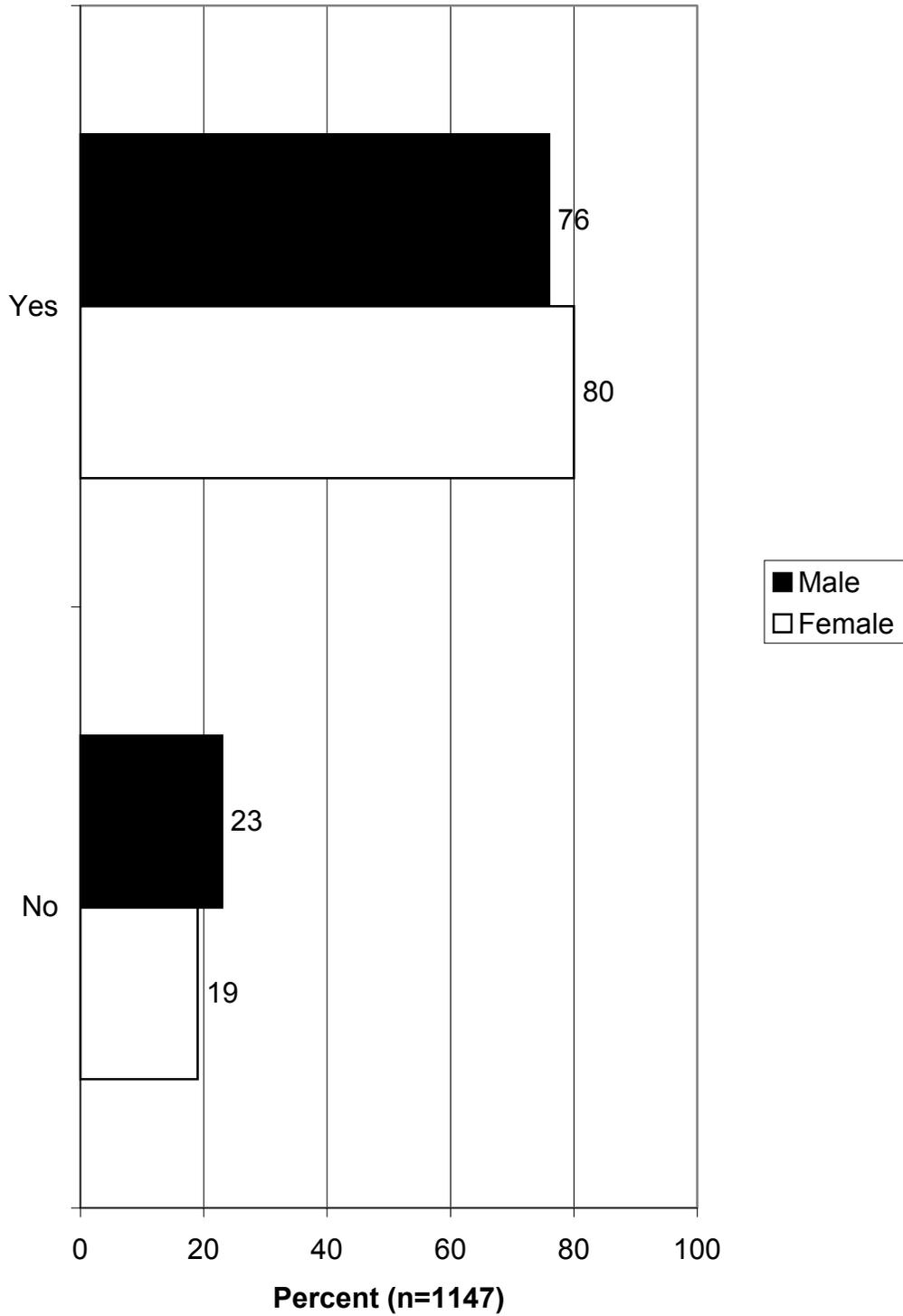
**Q48-66. Cont'd. Would the following make the fishing event or class WORSE.
By Gender.**



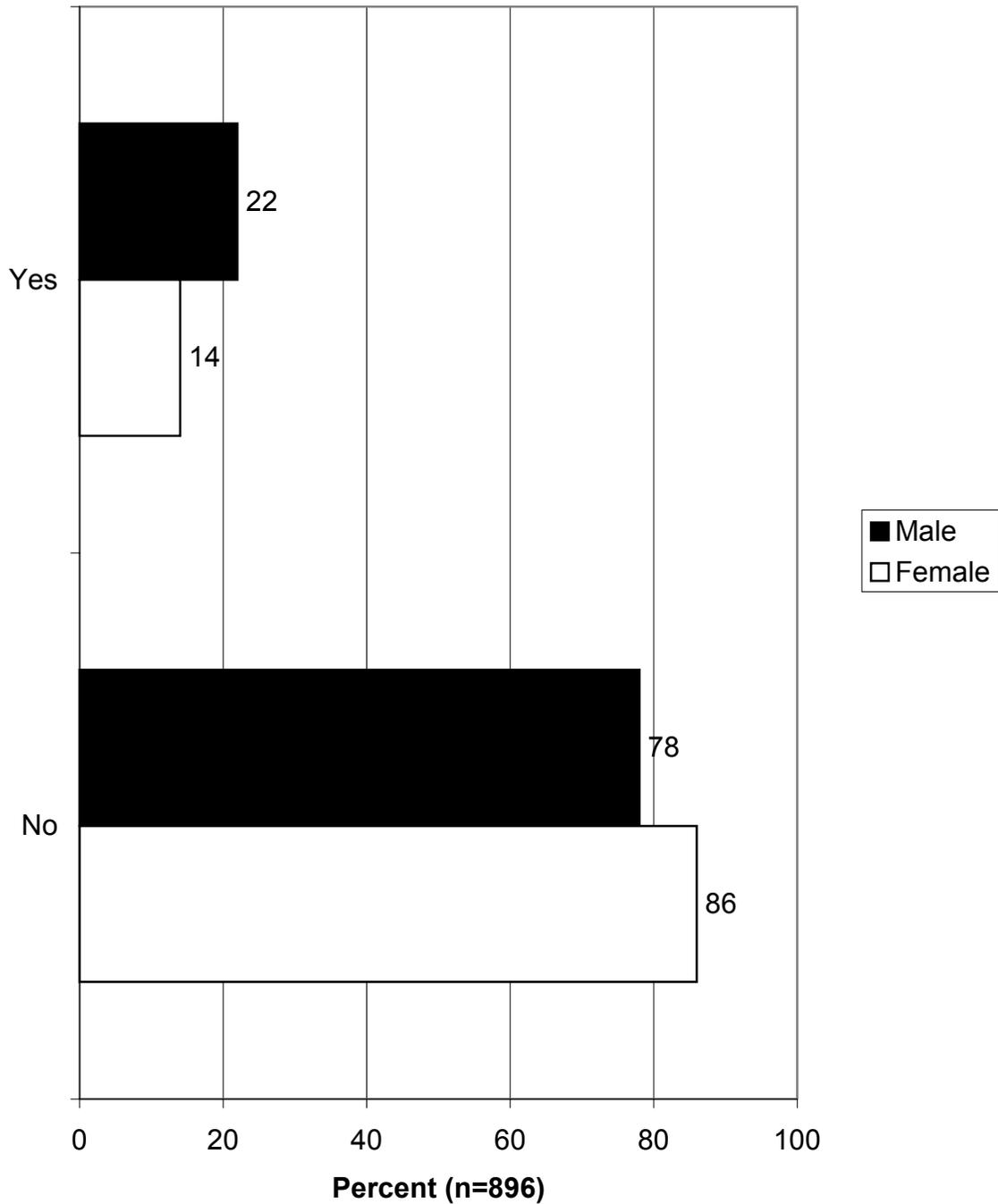
**Q67. Have you ever played a computer fishing game or hand held fishing game?
By Gender.**



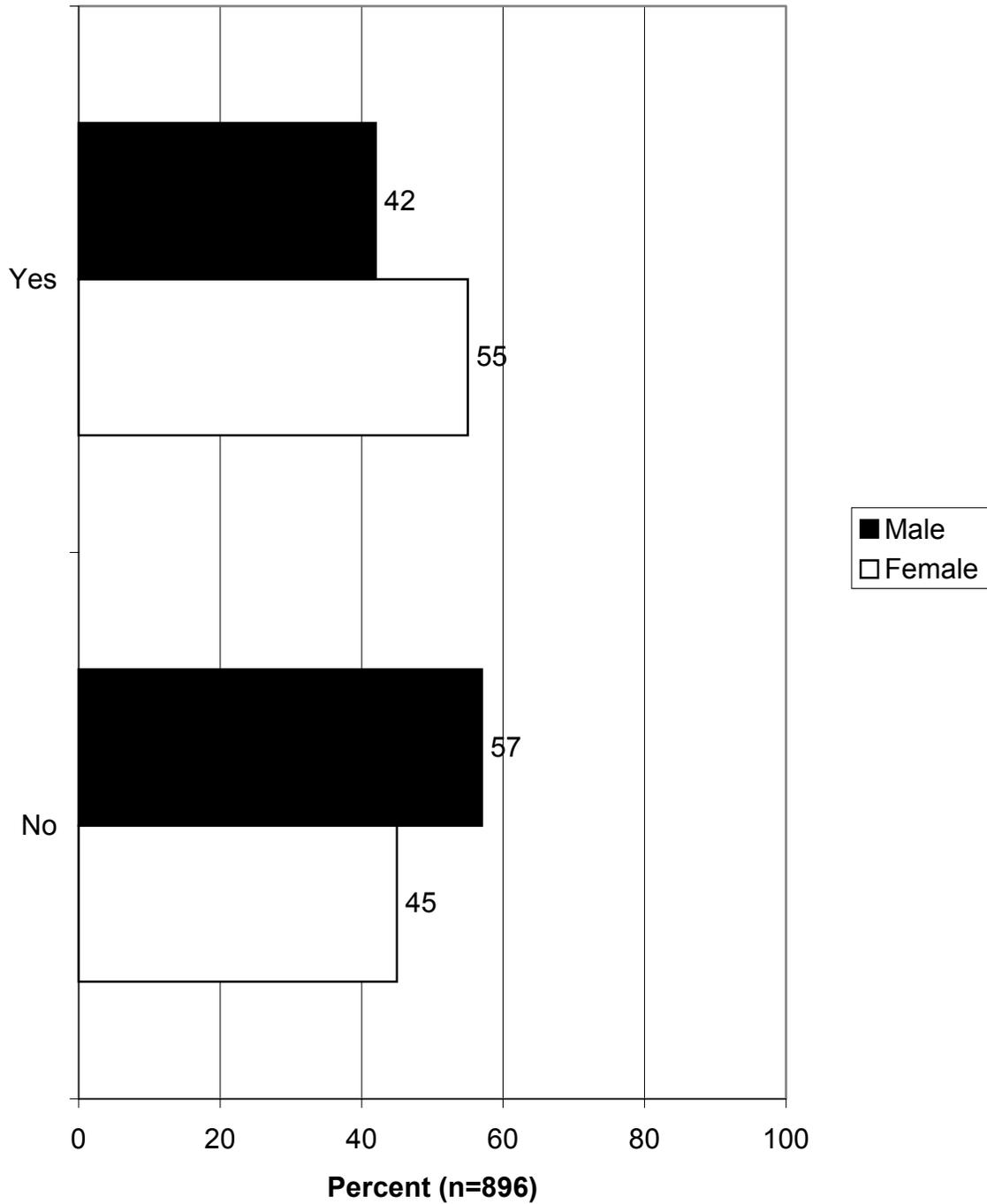
Q68. Do you use the Internet? By Gender.



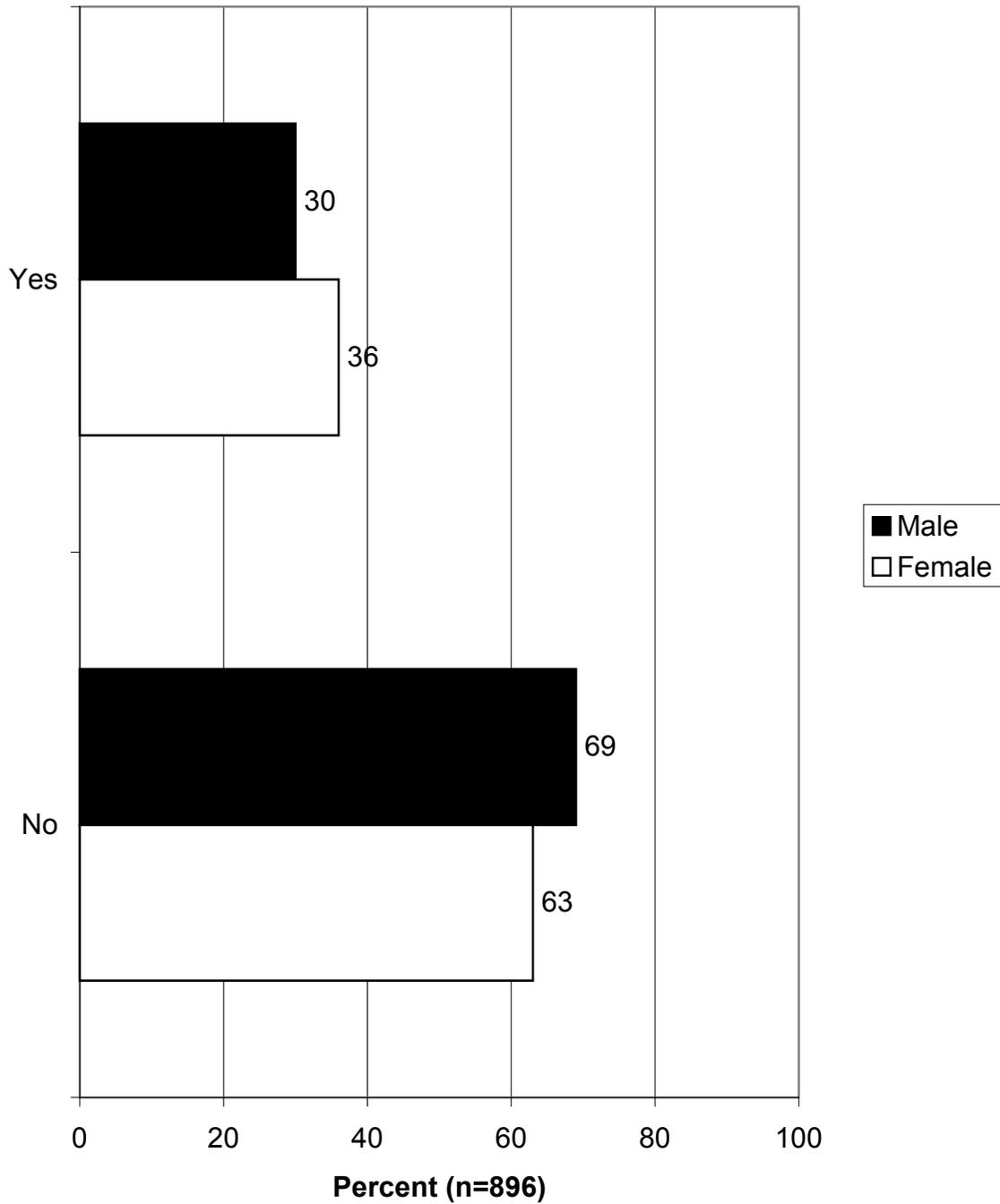
Q69. Do you use the Internet to find information about fishing? (asked of those who used the Internet). By Gender.



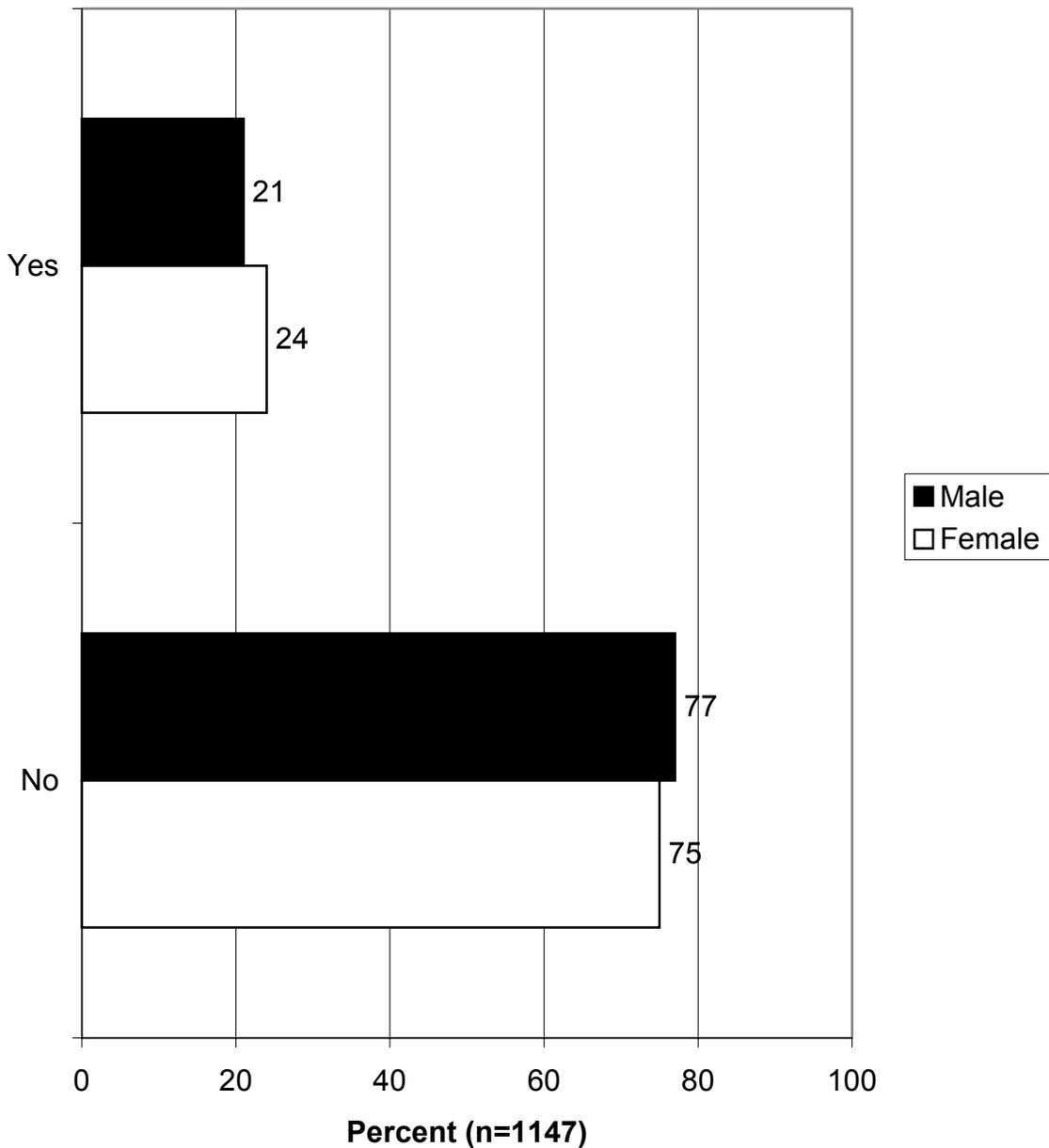
Q70. Do you use the Internet to find information about aquatic animals? (asked of those who used the Internet). By Gender.



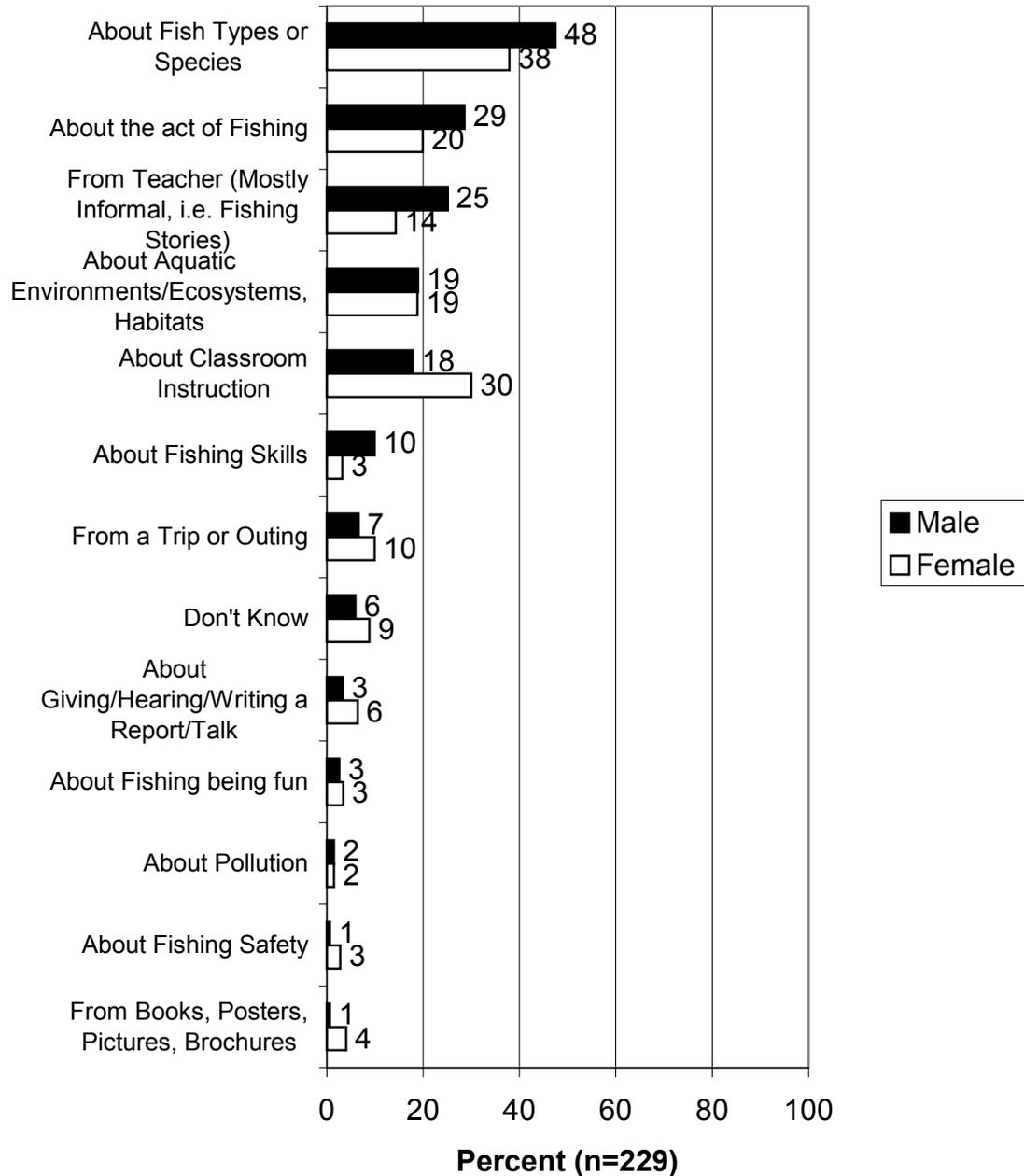
Q71. Do you use the Internet to find information about aquatic habitats? (asked of those who used the Internet). By Gender.



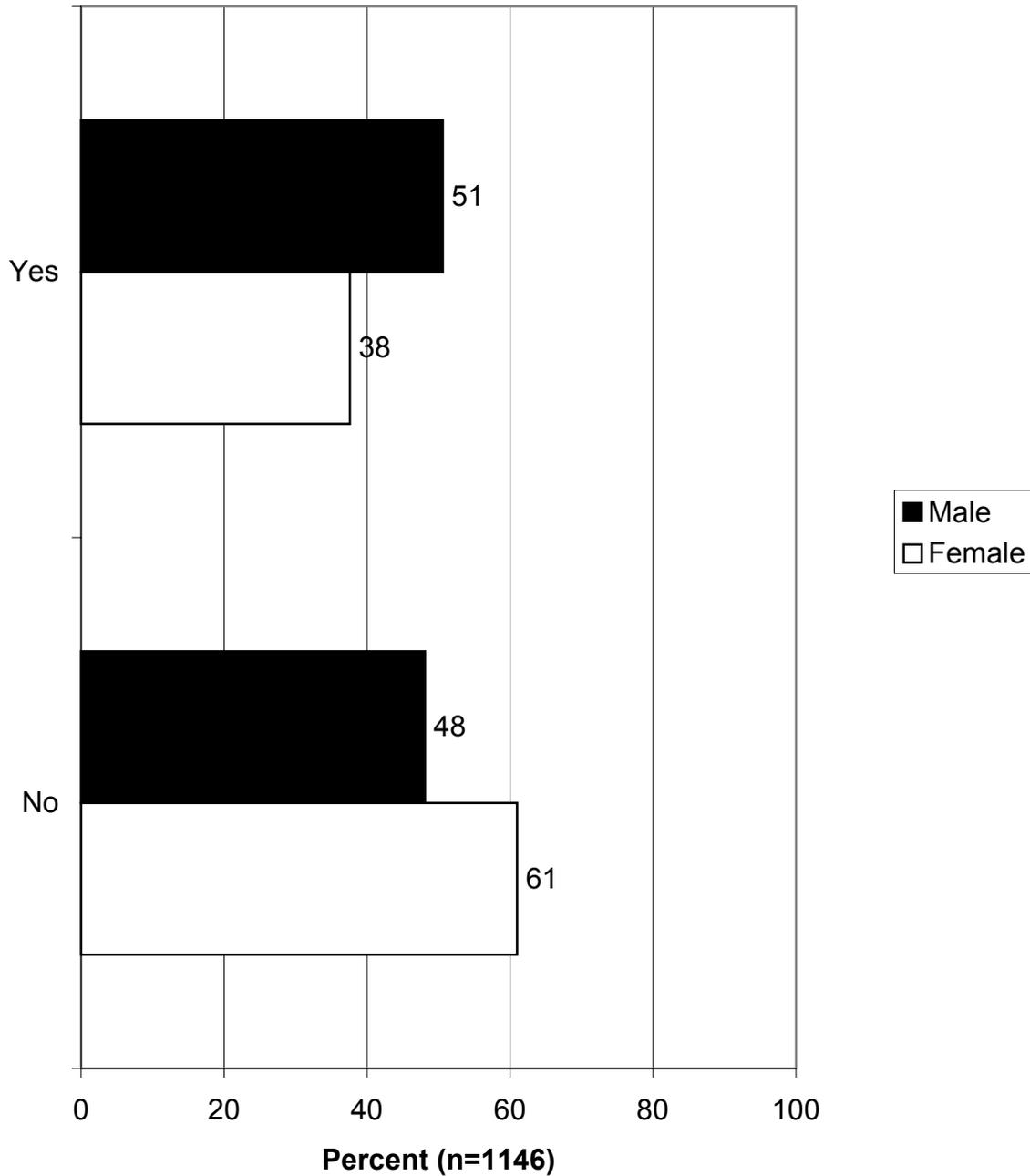
**Q72. Within the past 12 months, have you seen or heard any information from teachers or other adults IN YOUR SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?
By Gender.**



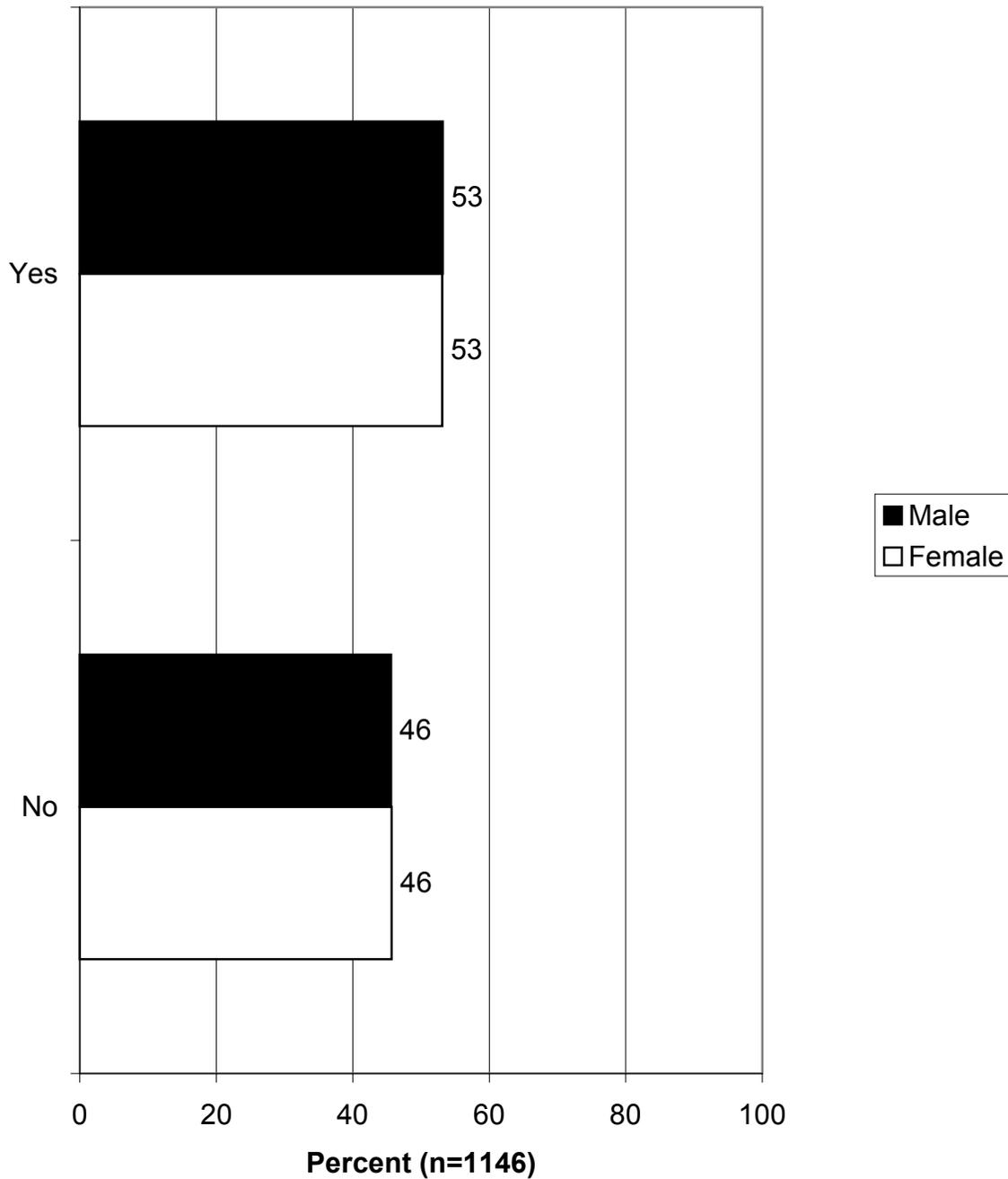
Q73. What did you see or hear IN SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? (asked of those who reported seeing or hearing information about fishing in school). By Gender. Information....



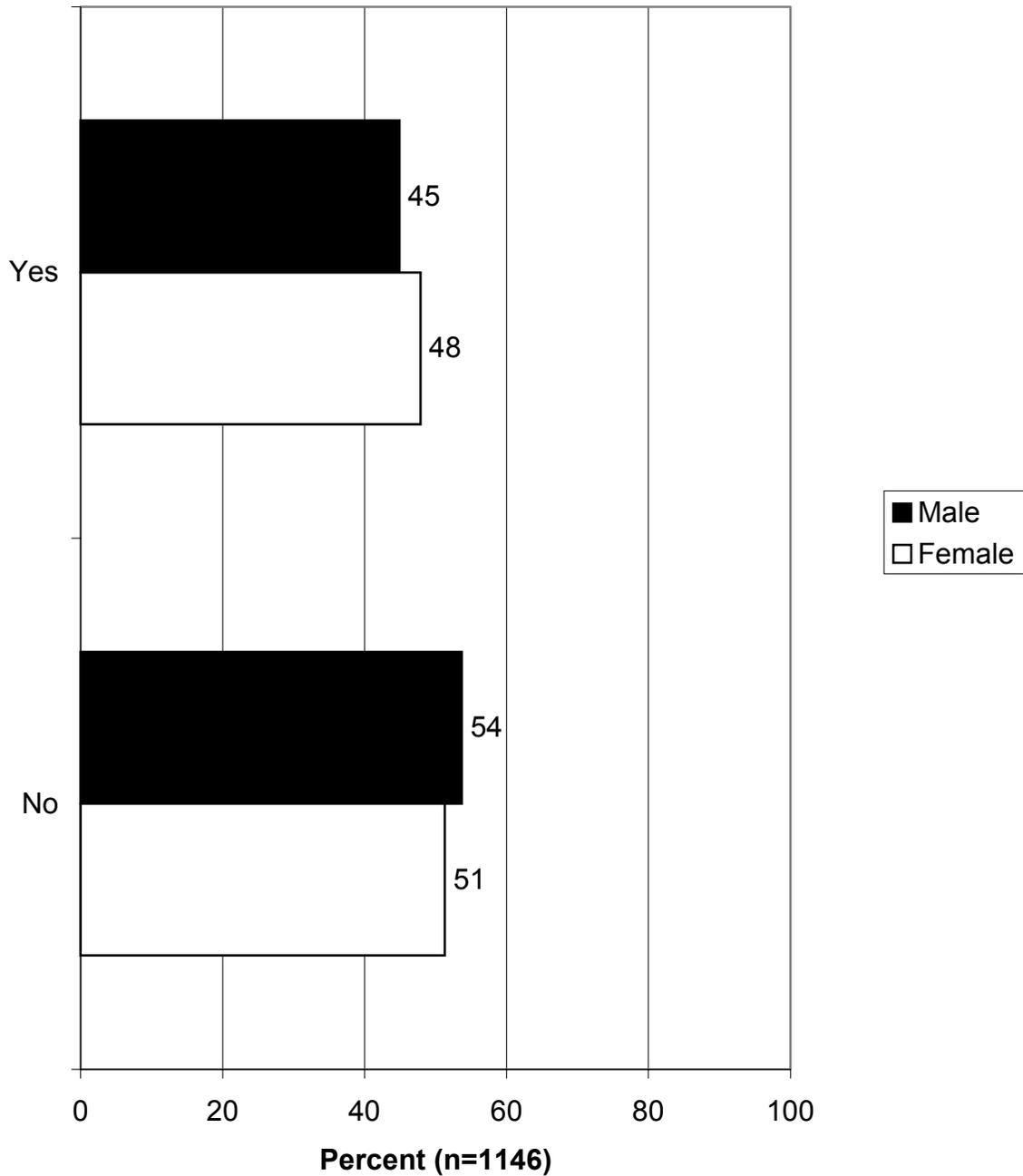
Q74. Within the past 12 months, have you seen or heard any information OUTSIDE OF SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? By Gender.



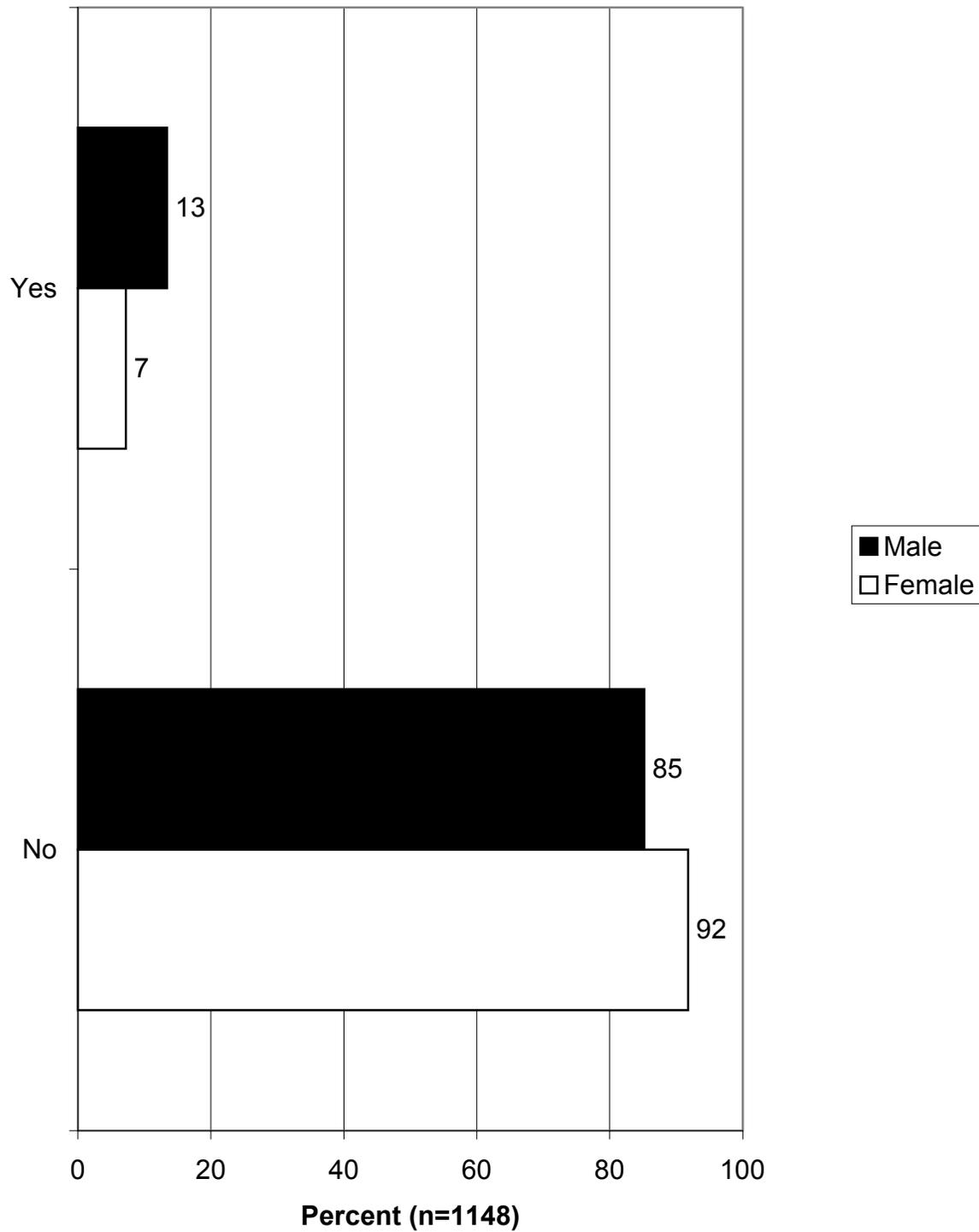
Q76. Within the past 12 months, did your school class do anything to help you learn about the oceans and the animals and plants that live there? By Gender.



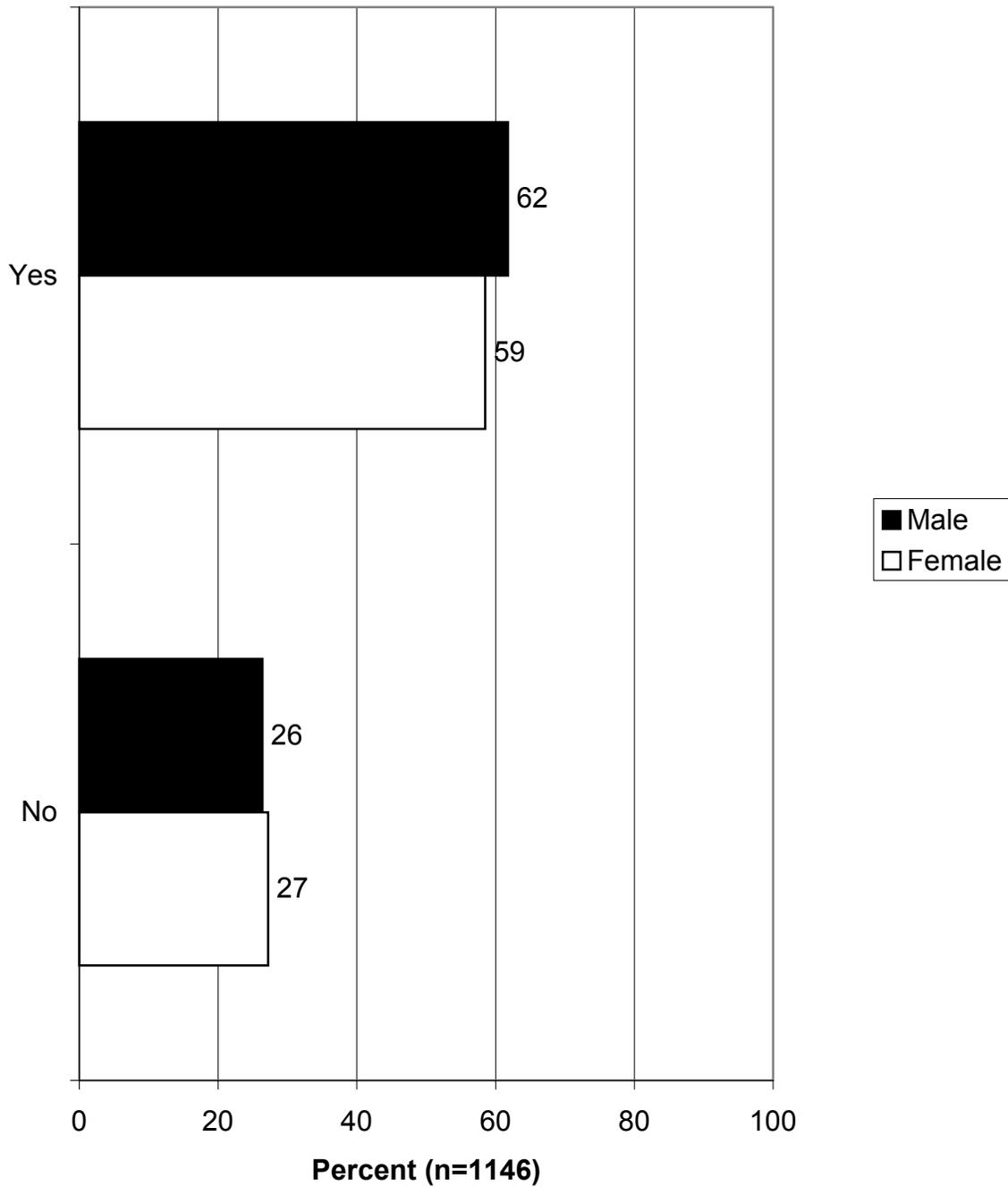
Q77. Within the past 12 months, did your school class do anything to help you learn about South Carolina rivers, ponds, lakes or streams and the animals and plants that live there? By Gender.



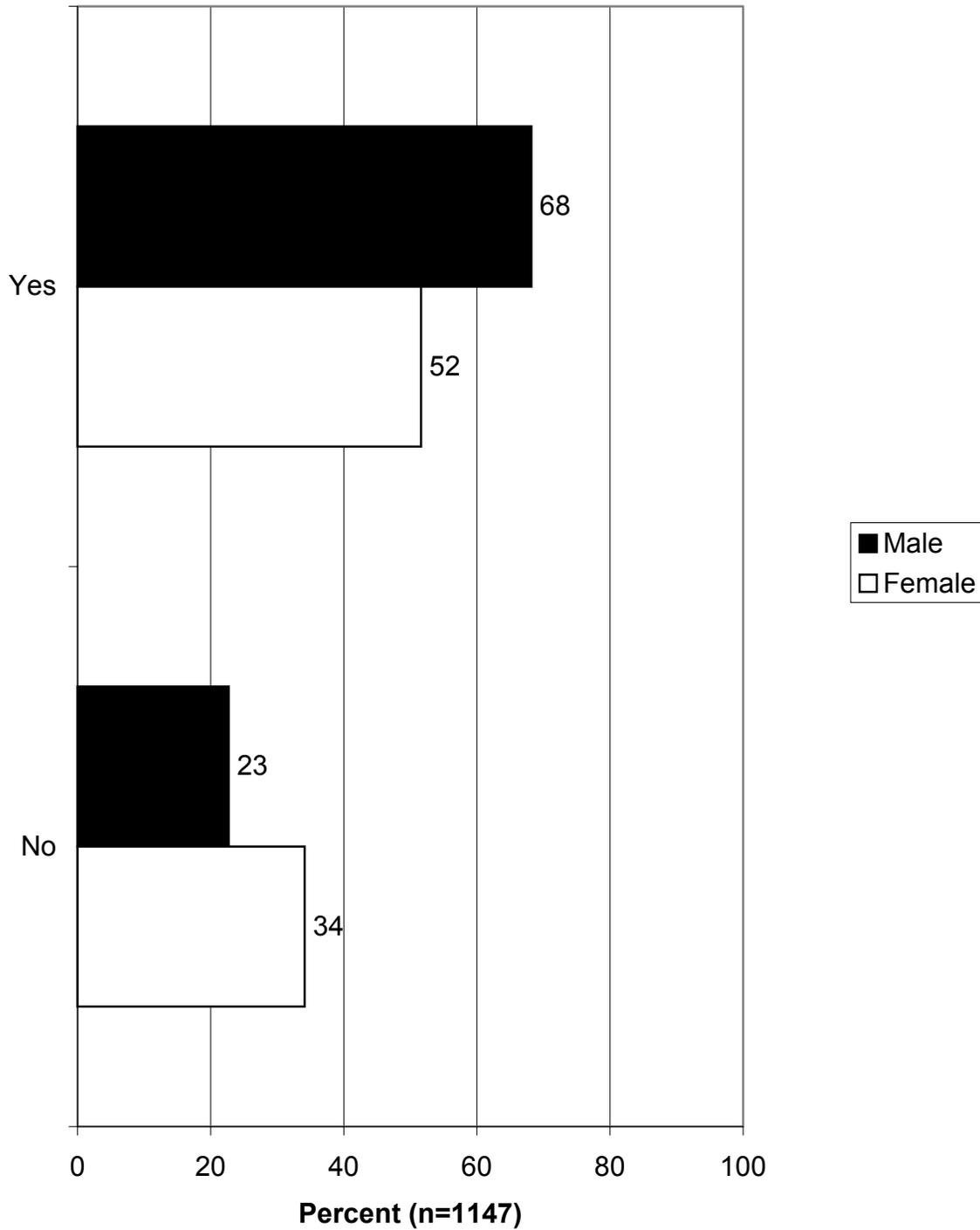
Q78. Do you belong to an animal or outdoor club? By Gender.



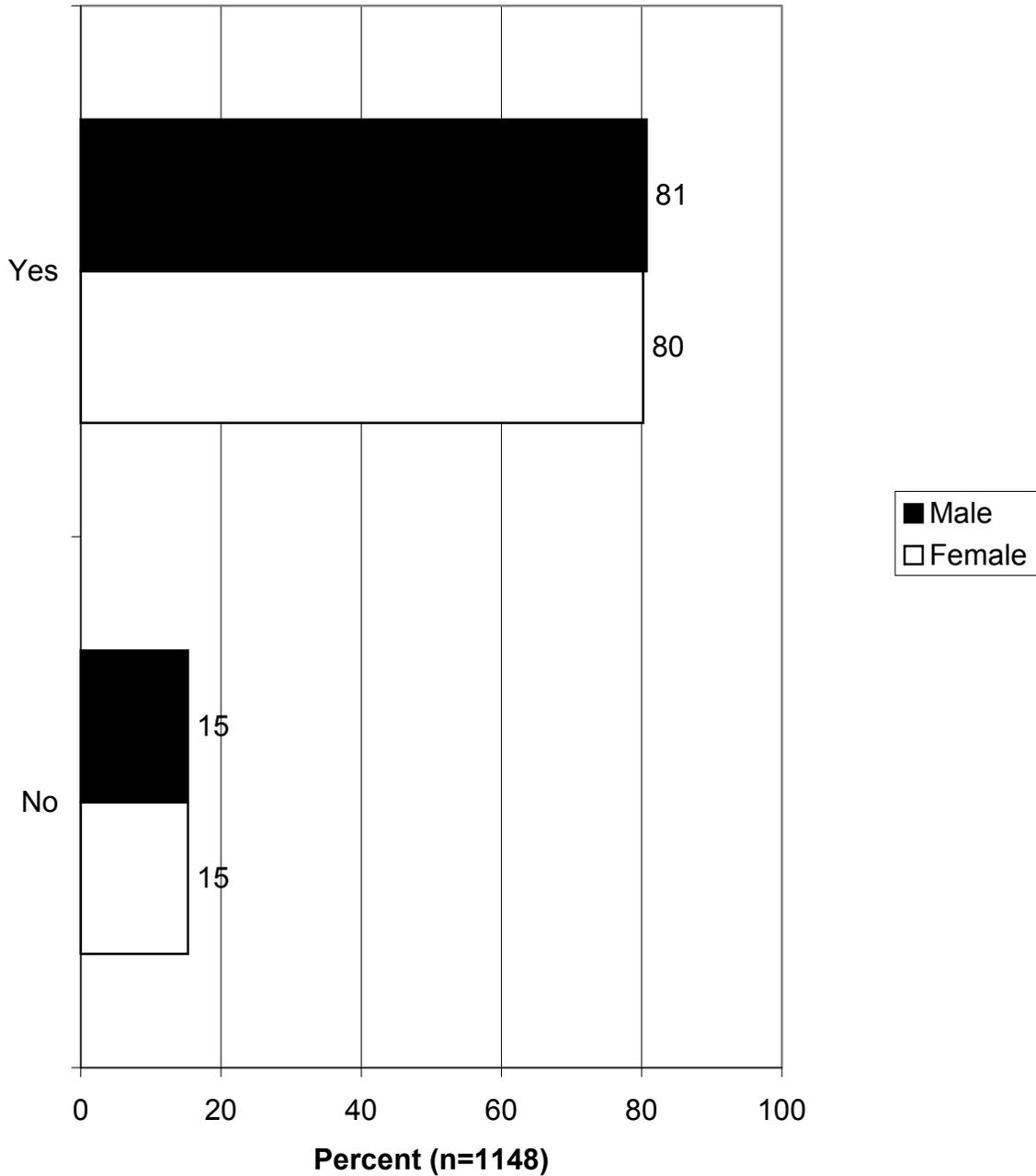
Q79. Would you join a club that helped you learn more about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live there? By Gender.



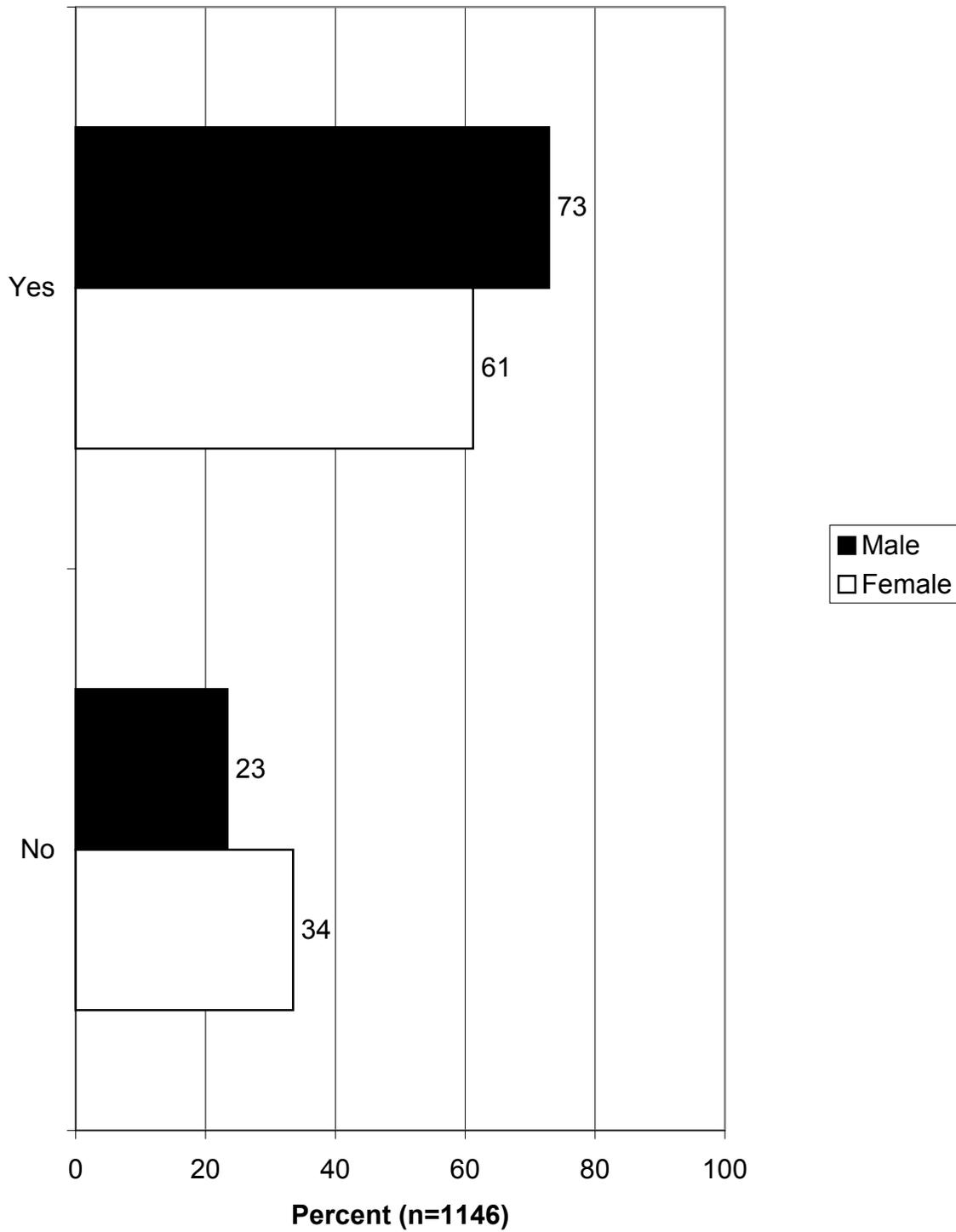
Q80. Would you join a club that helped you learn more about fishing? By Gender.



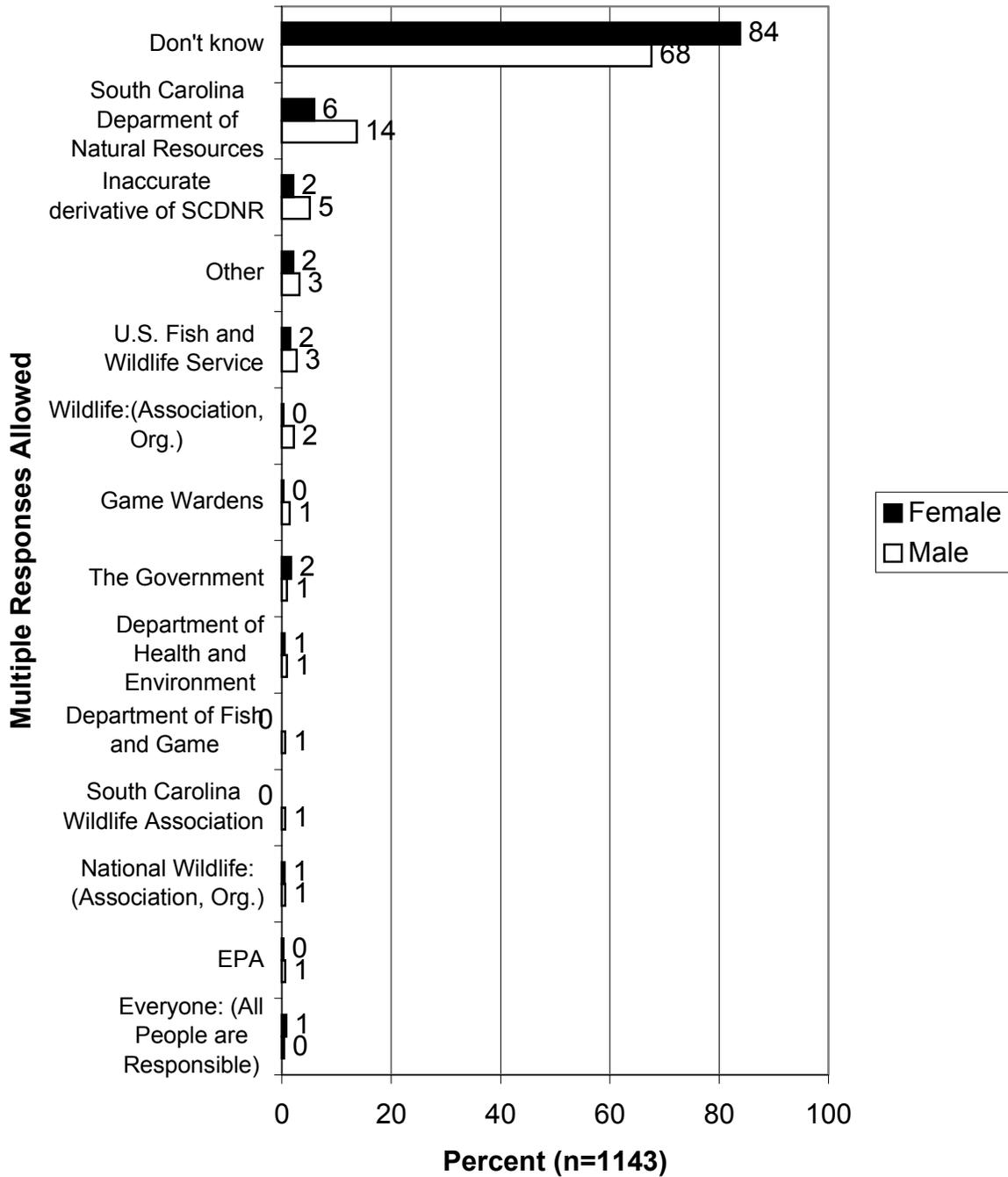
**Q81. Would you like to learn more in your school class about South Carolina's rivers, ponds, lakes and streams and the animals and plants that live there?
By Gender.**



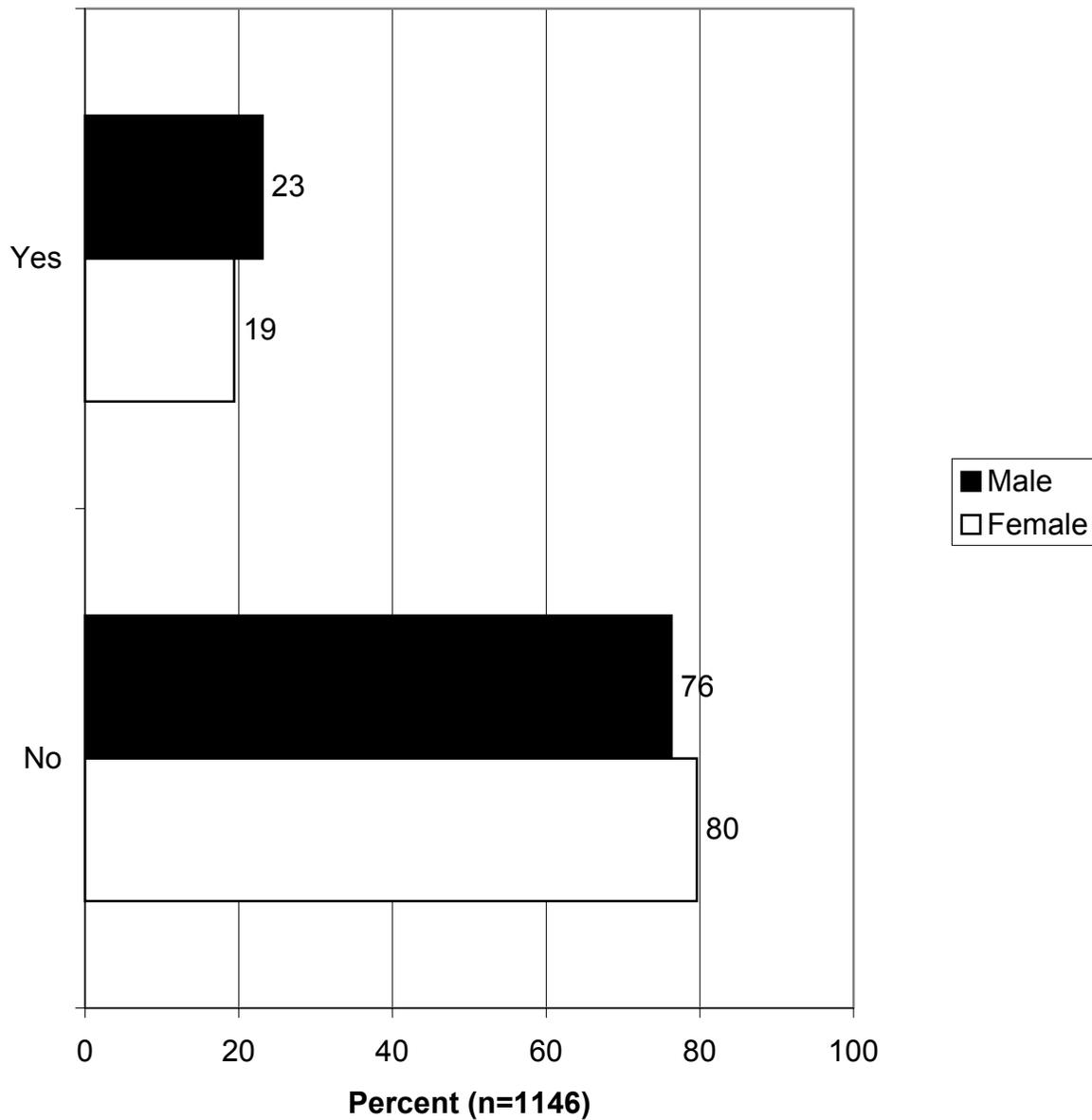
Q82. Would you like to learn more in your school class about fishing? By Gender.



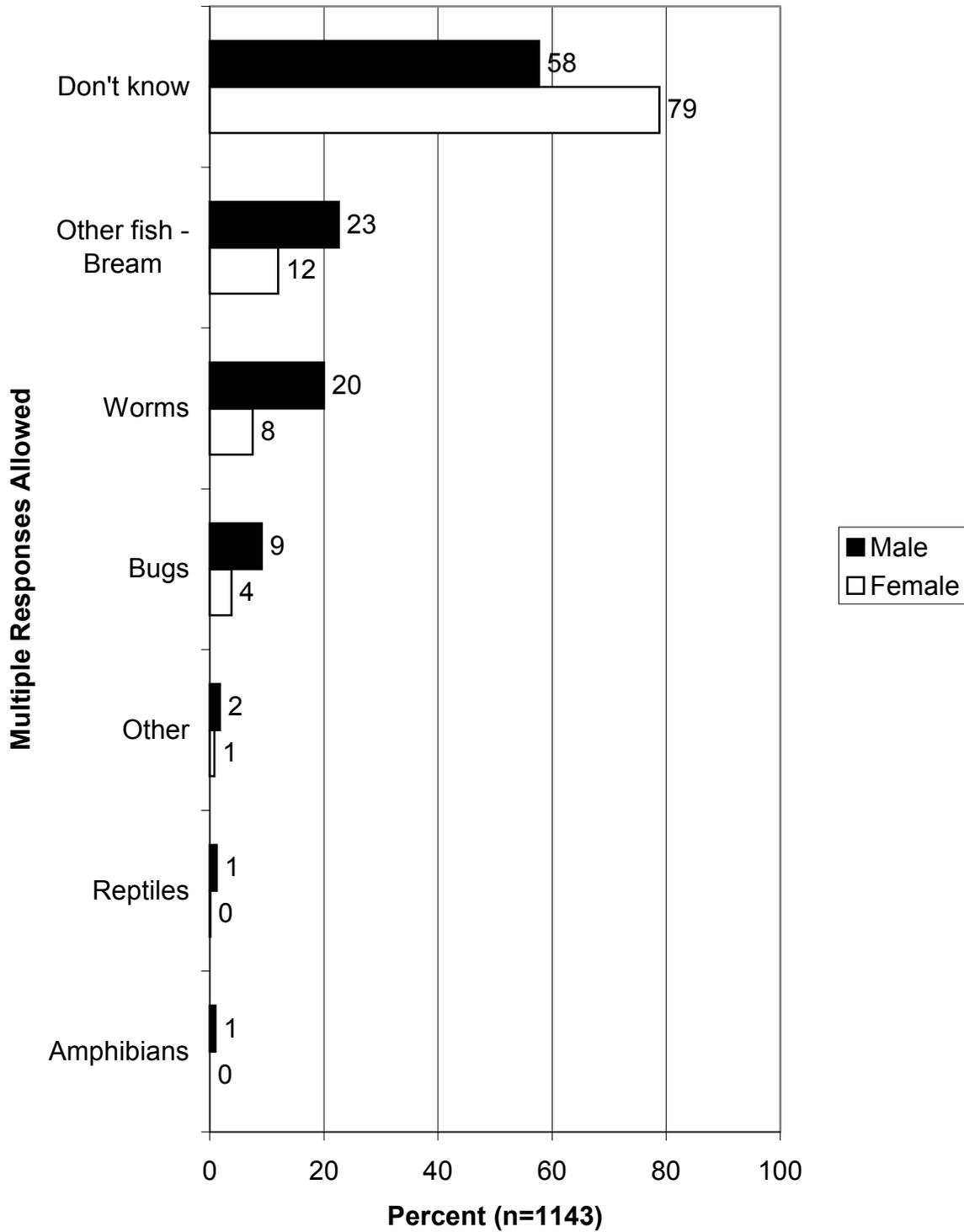
Q84. Who do you think is the state agency responsible for managing and conserving fish and wildlife in South Carolina? By Gender.



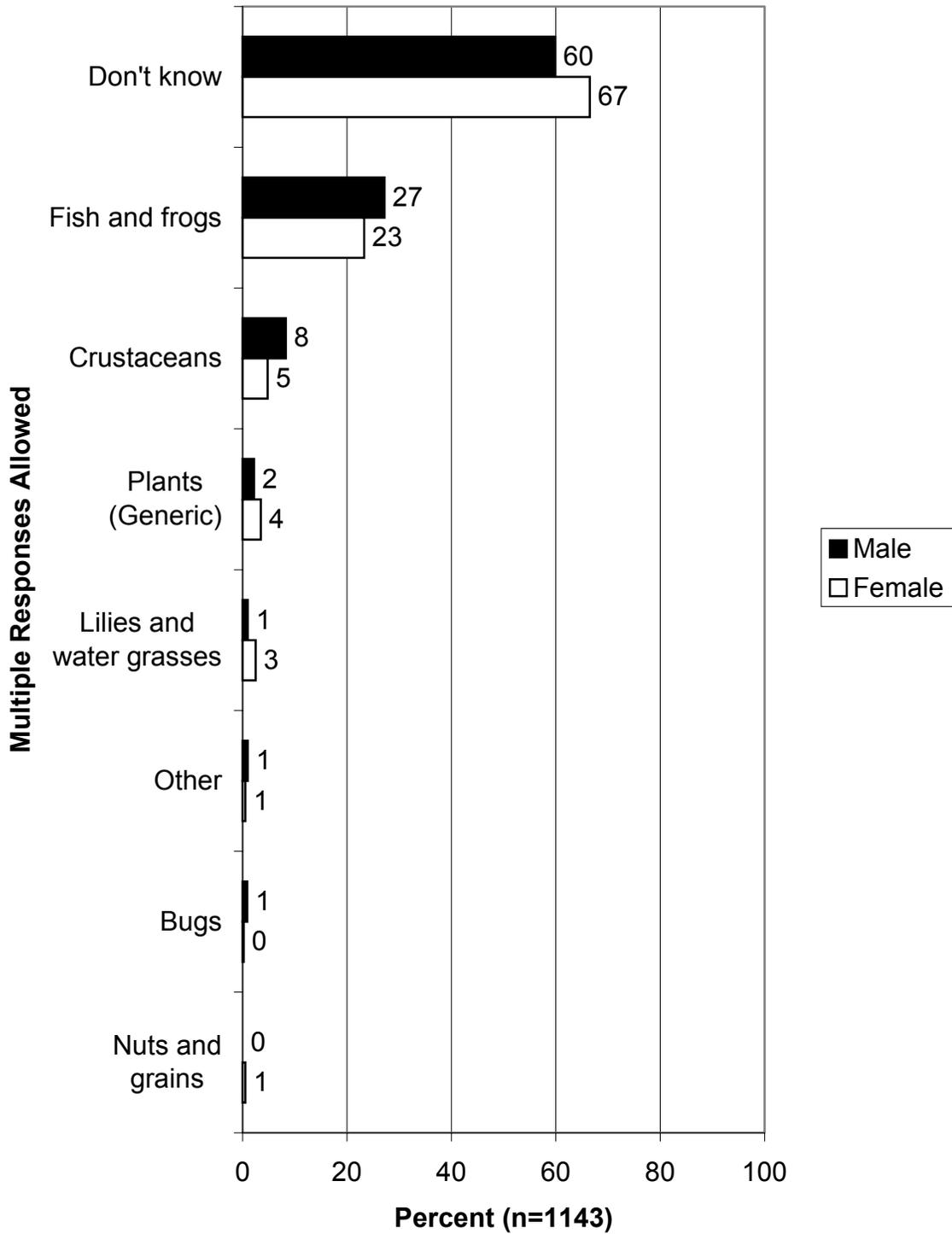
**Q86. The South Carolina DNR provides a number of fishing programs, such as "Hooked on Fishing," the "Fishing Tackle Loaner Program," and "South Carolina Reel Kids," to name a few. Have you heard of any of these programs?
By Gender.**



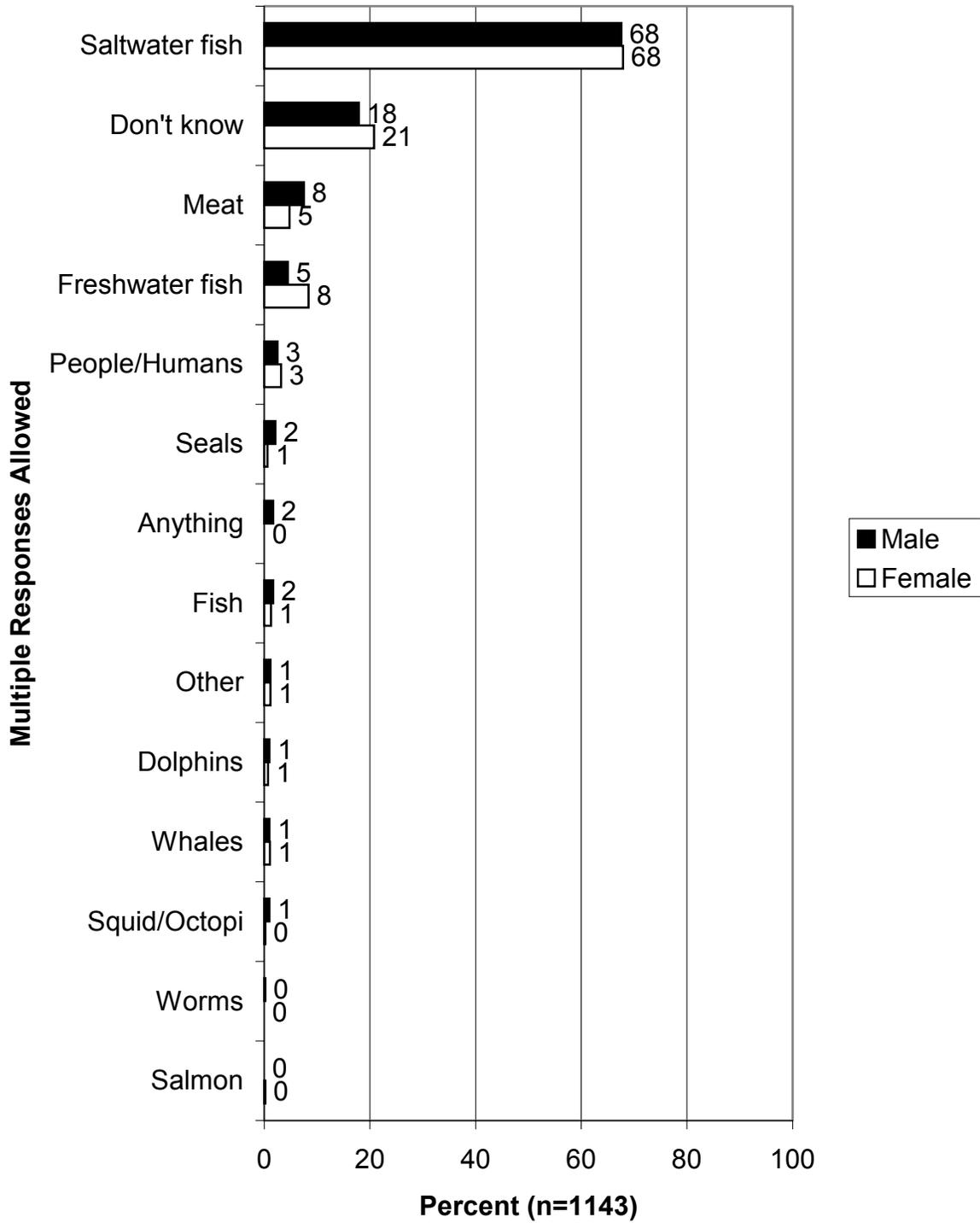
Q90. What kind of food do Largemouth Bass eat? By Gender



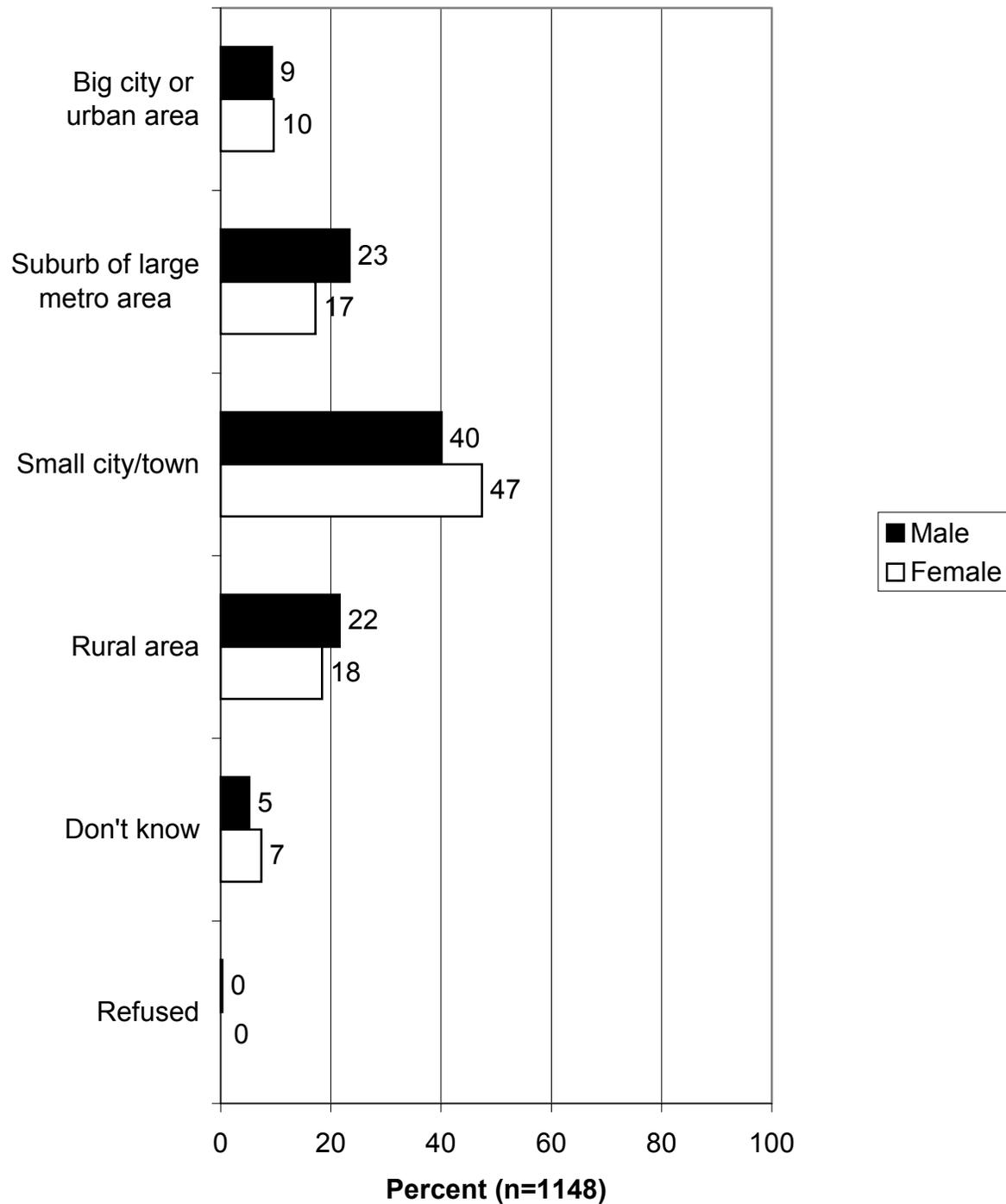
Q93. What does a River Otter usually eat? By Gender.



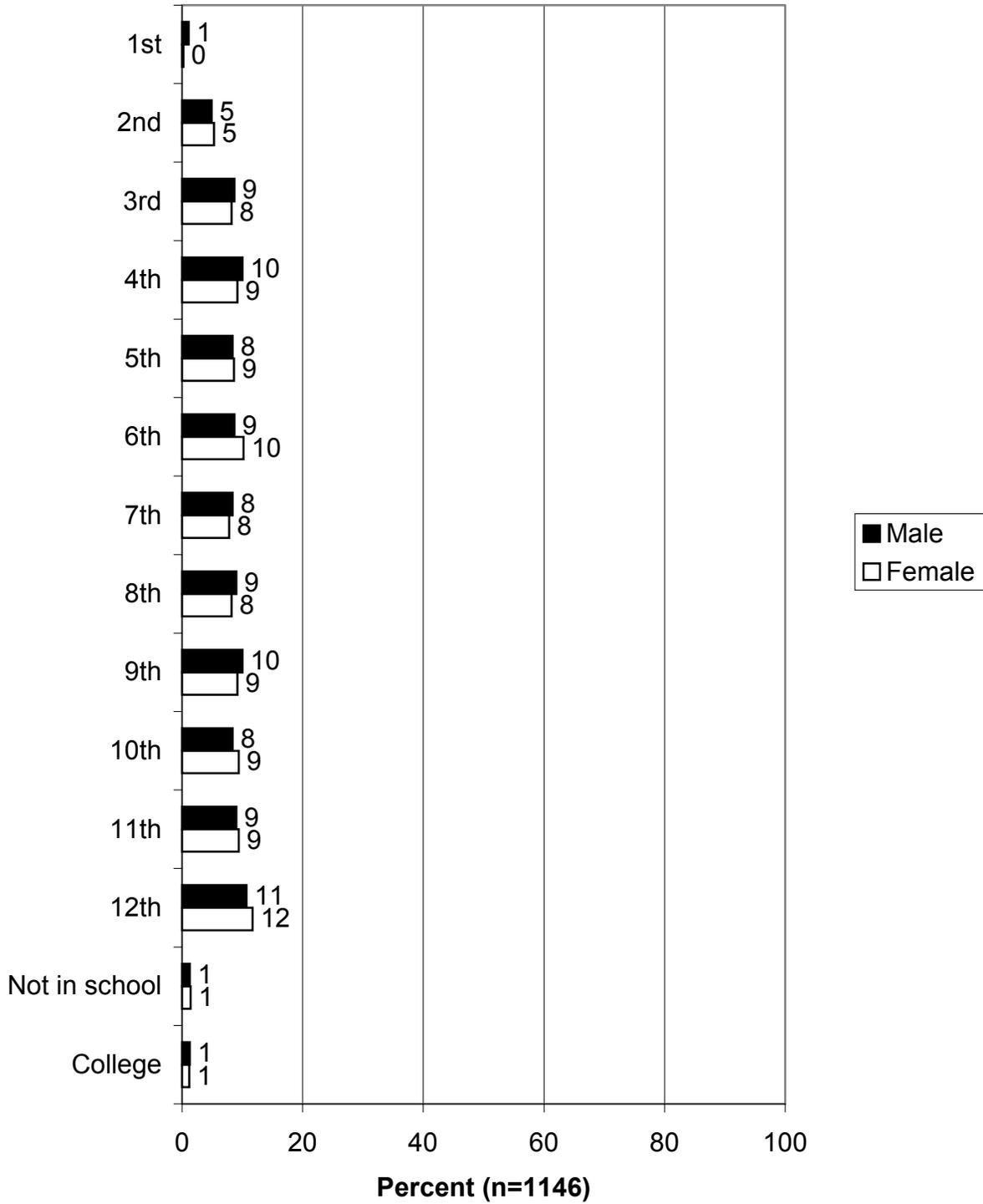
Q96. What type of food do sharks usually eat? By Gender.



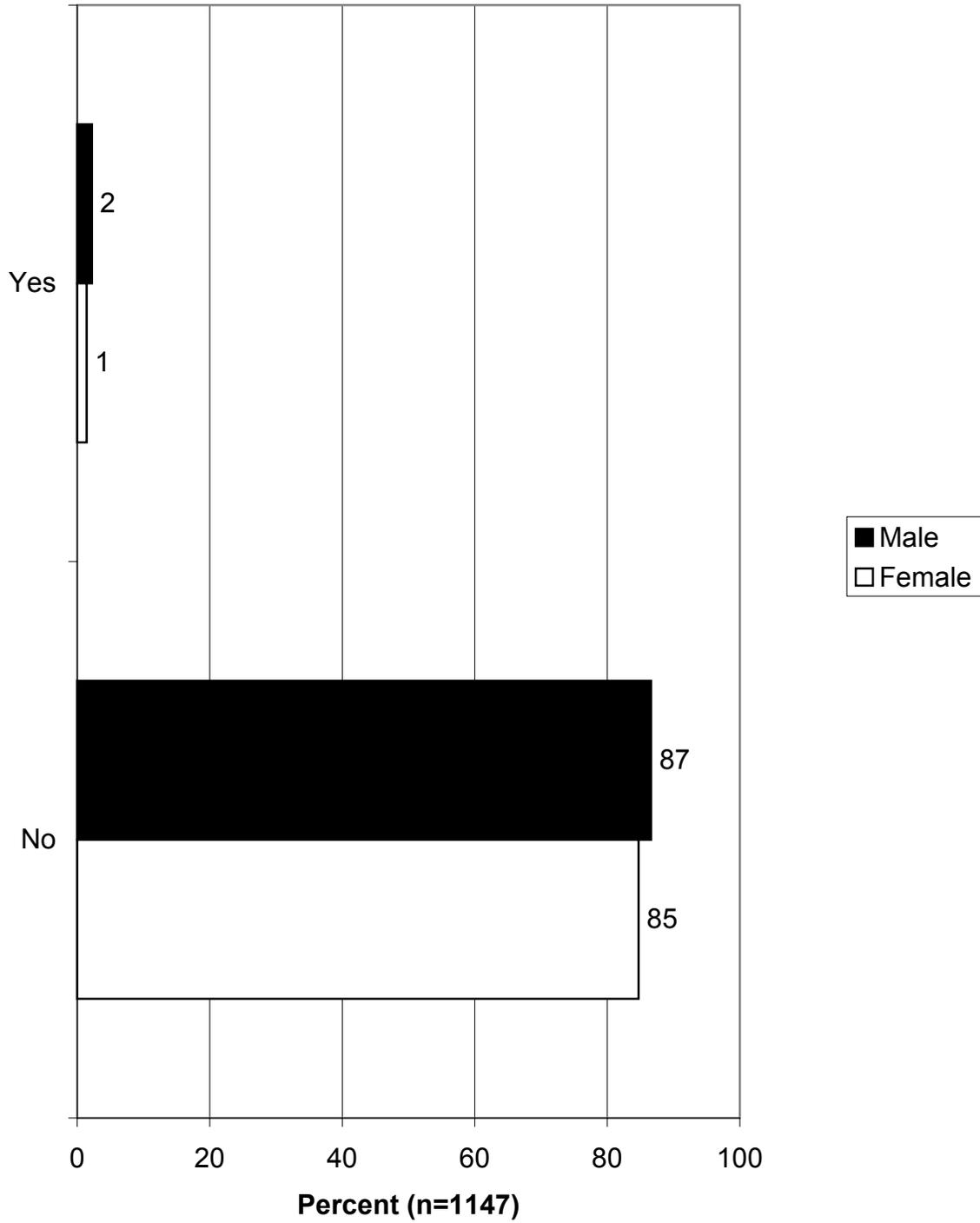
Q99. Do you consider where you live to be a big city, a suburban area, a small city/town or a rural area? By Gender.



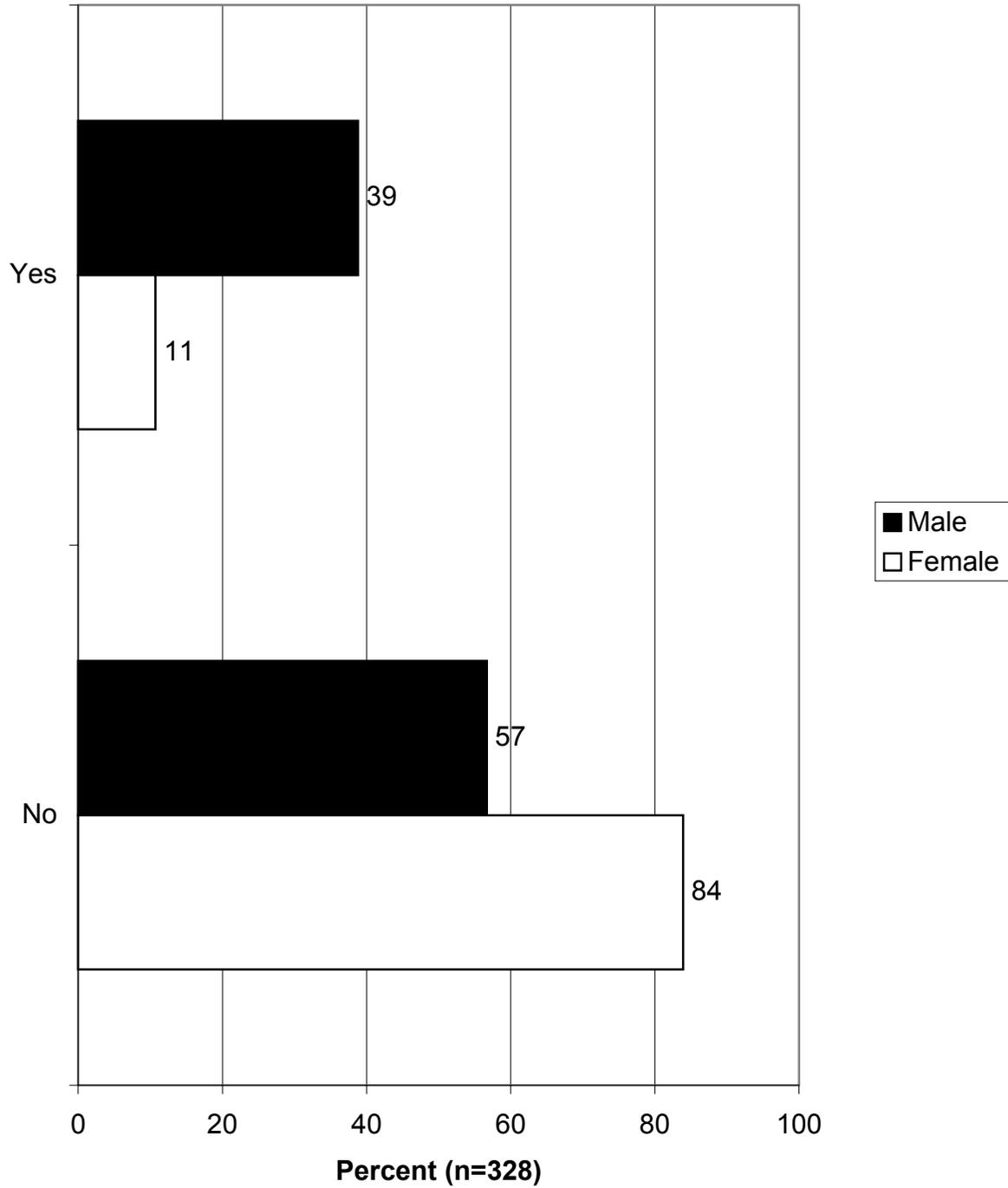
Q100. What grade in school are you in? By Gender.



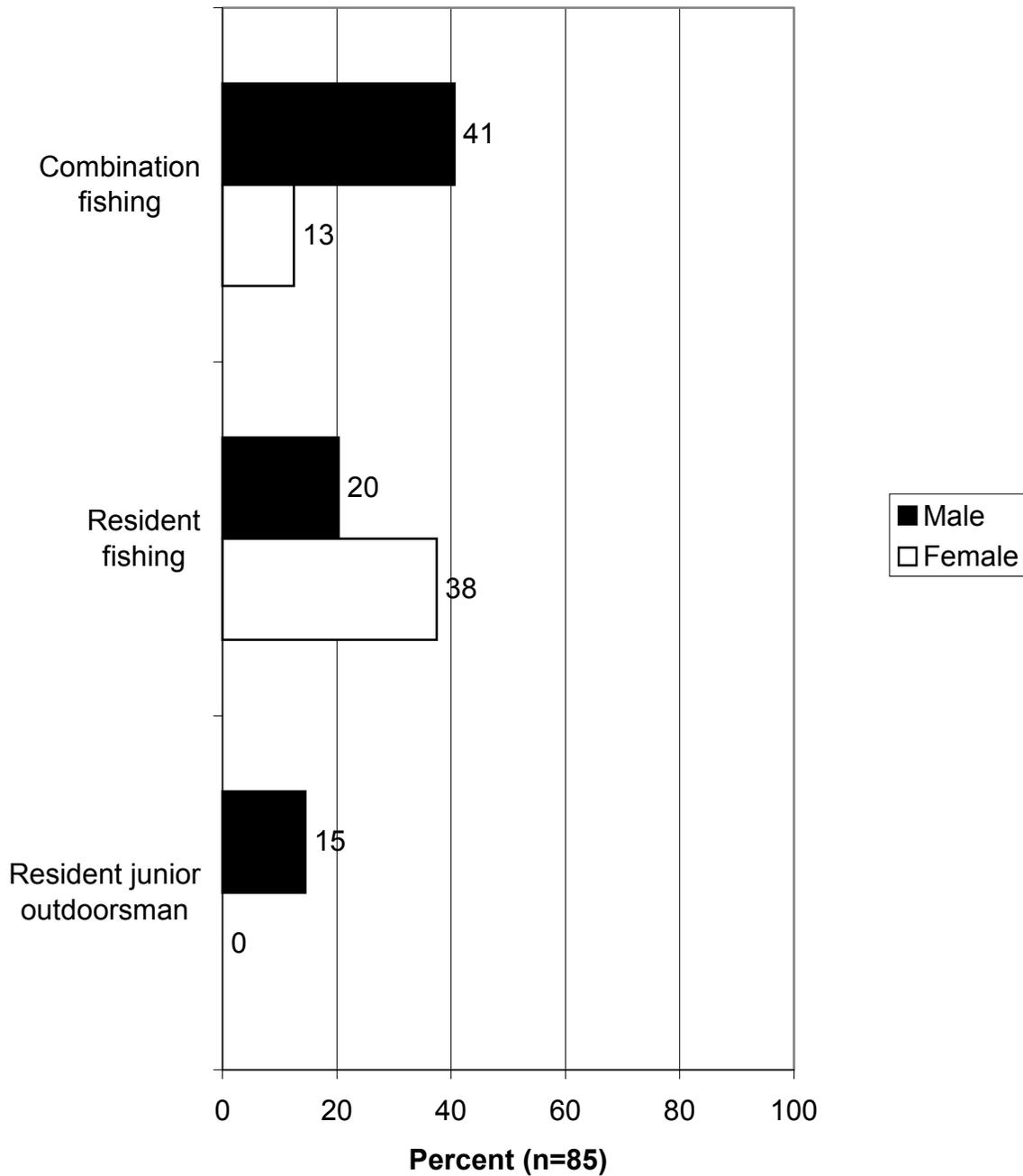
**Q101. Are you of Hispanic or Latino ethnicity?
By Gender.**



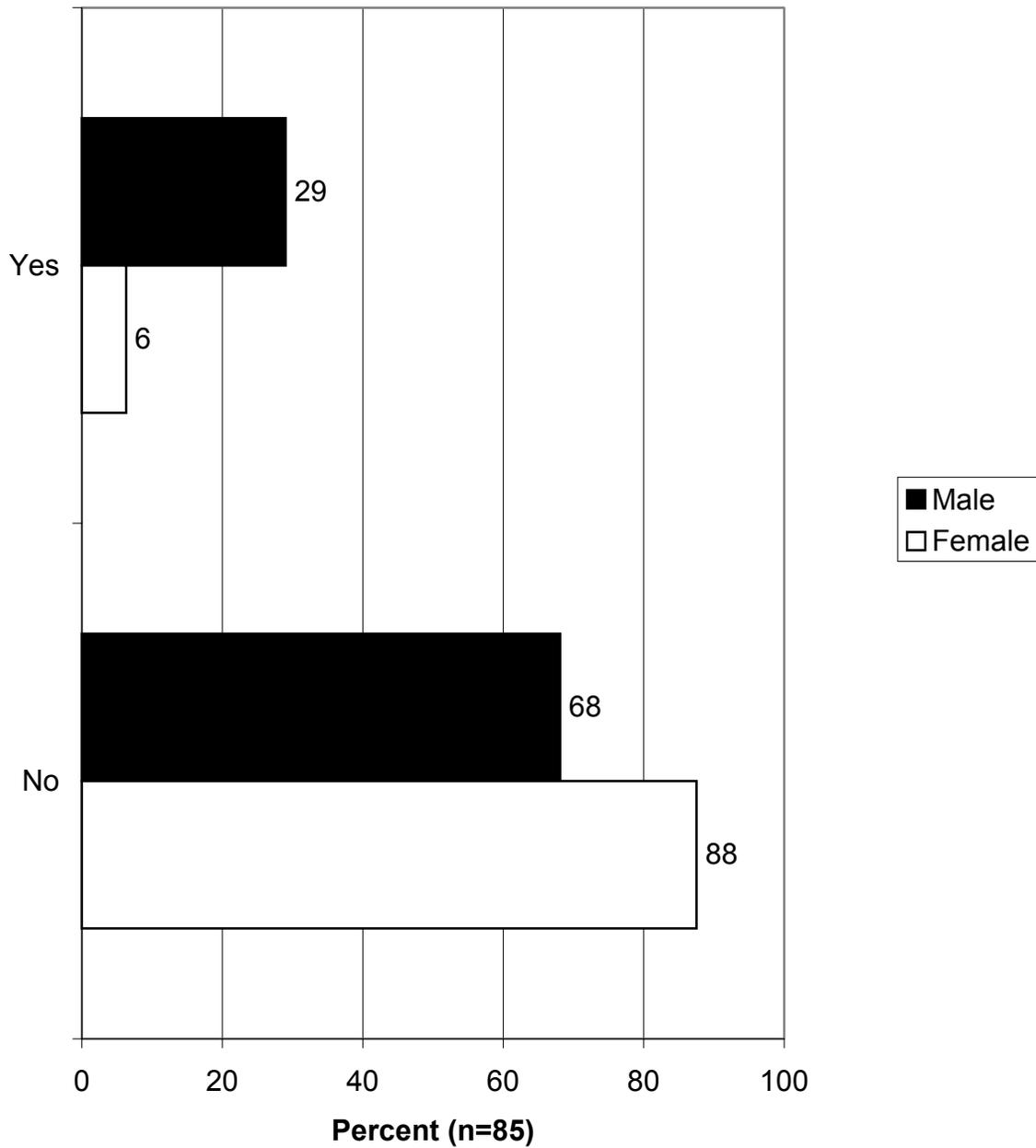
**Q105. Have you purchased a South Carolina fishing license? By Gender.
(asked of those aged 16 or older).**



Q106. What type of South Carolina fishing license did you buy? (asked of those who reported purchasing a South Carolina fishing license). By Gender.

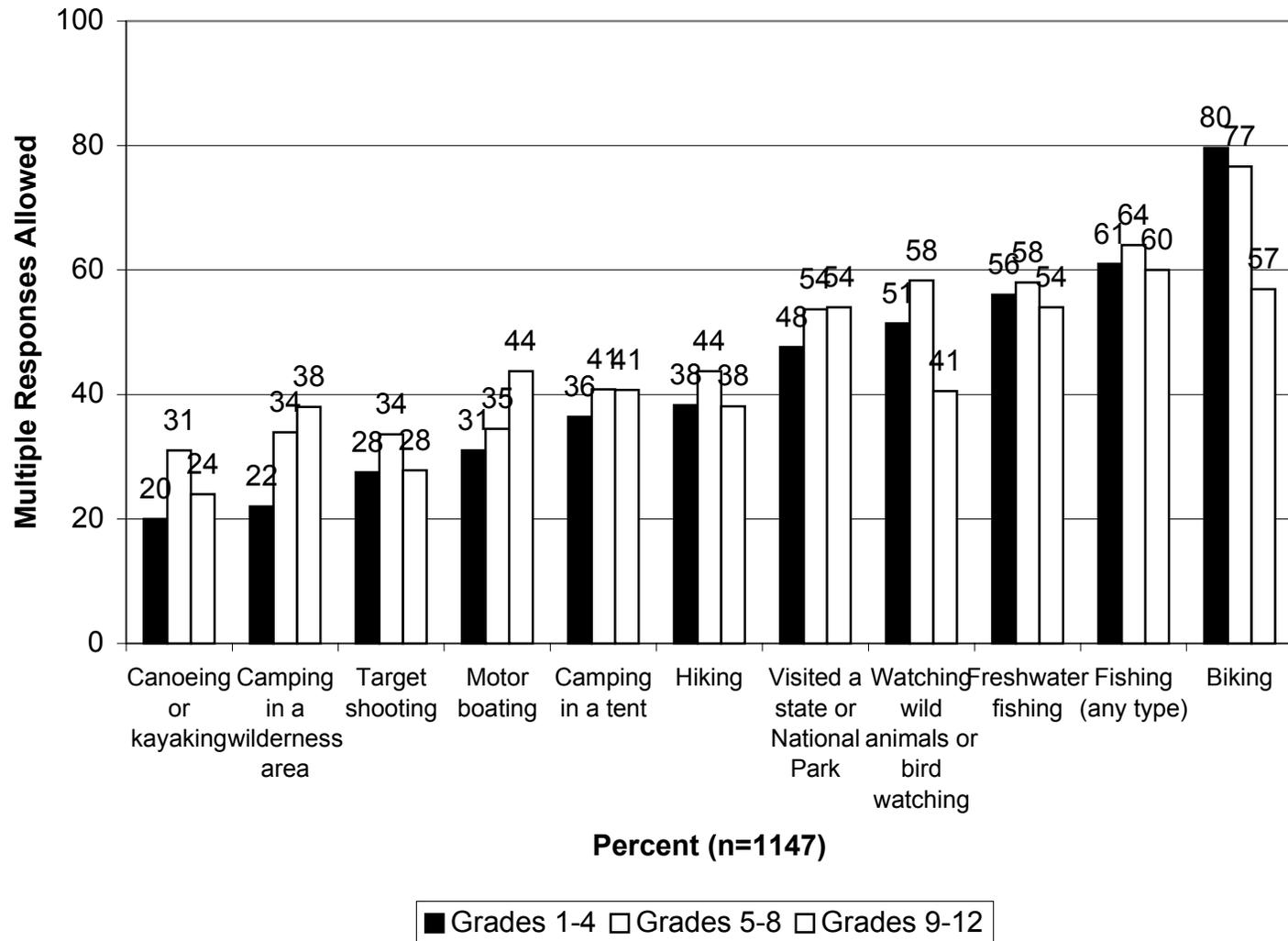


**Q107. Does the fact that you are required to buy a fishing license keep you from buying a license and going fishing?
(asked of those who reported purchasing a South Carolina fishing license).
By Gender.**

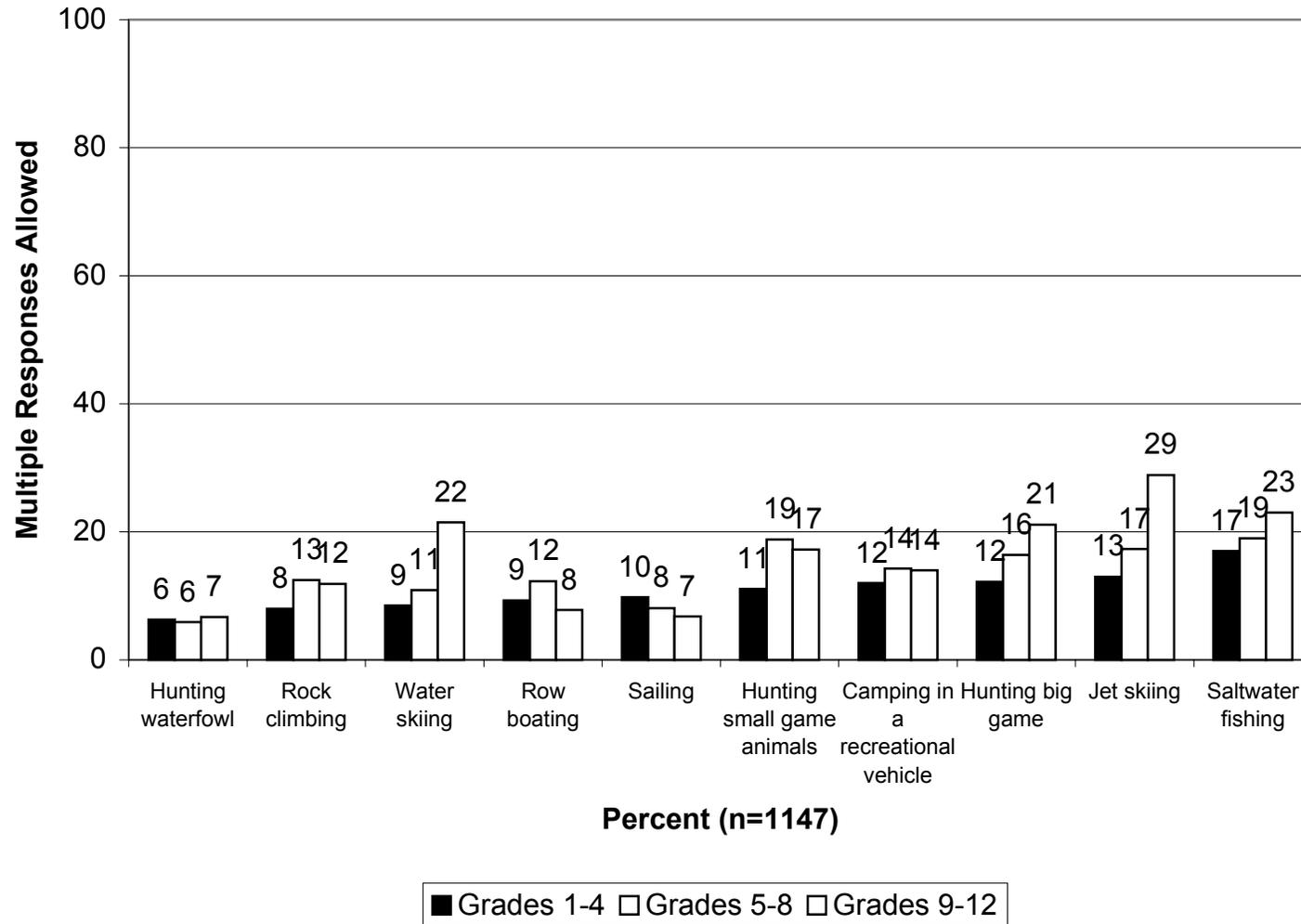


Graphs by Grade Cohort

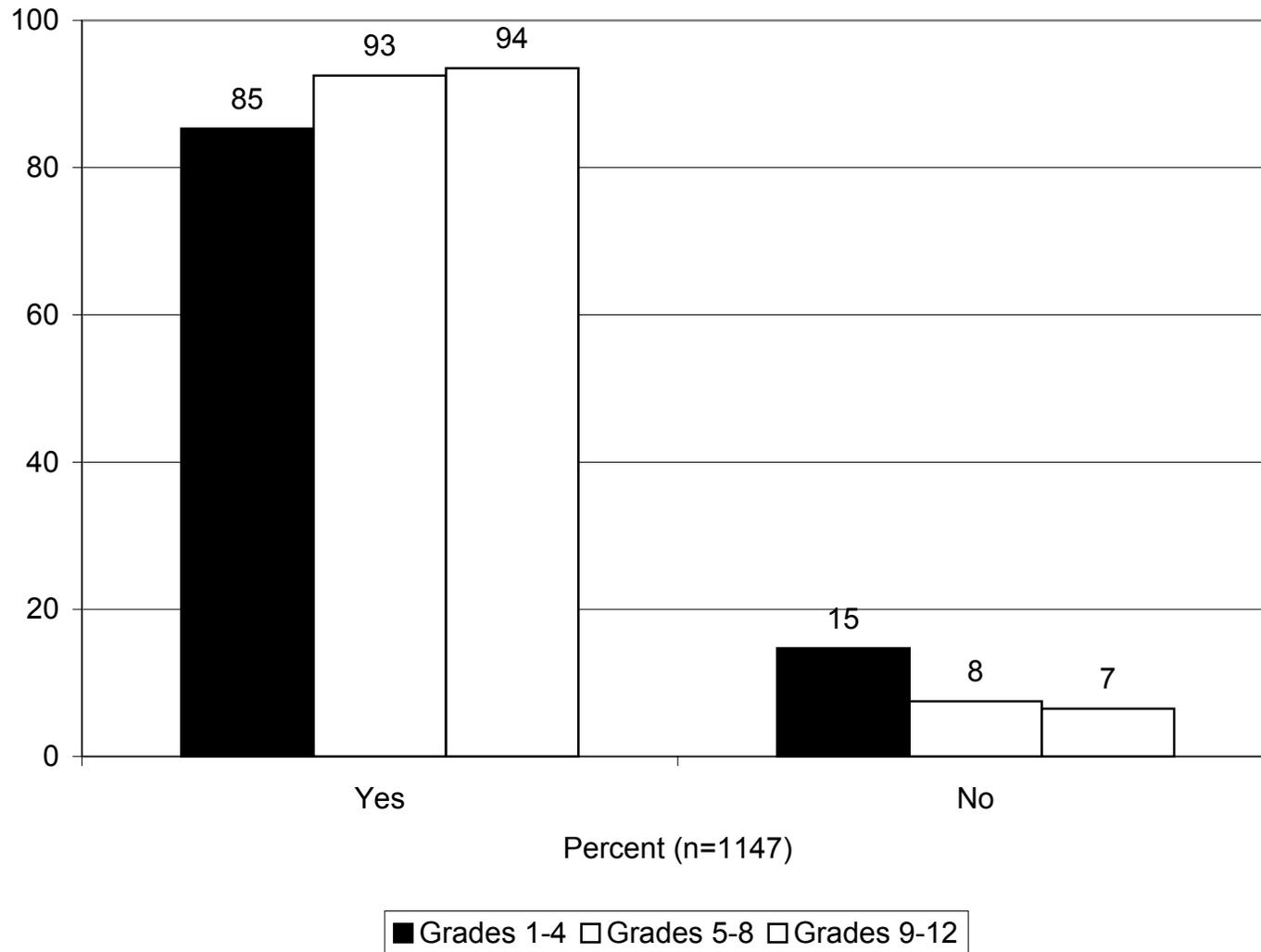
Q8. Activities participated in within the past 12 months. By Grade Cohort.



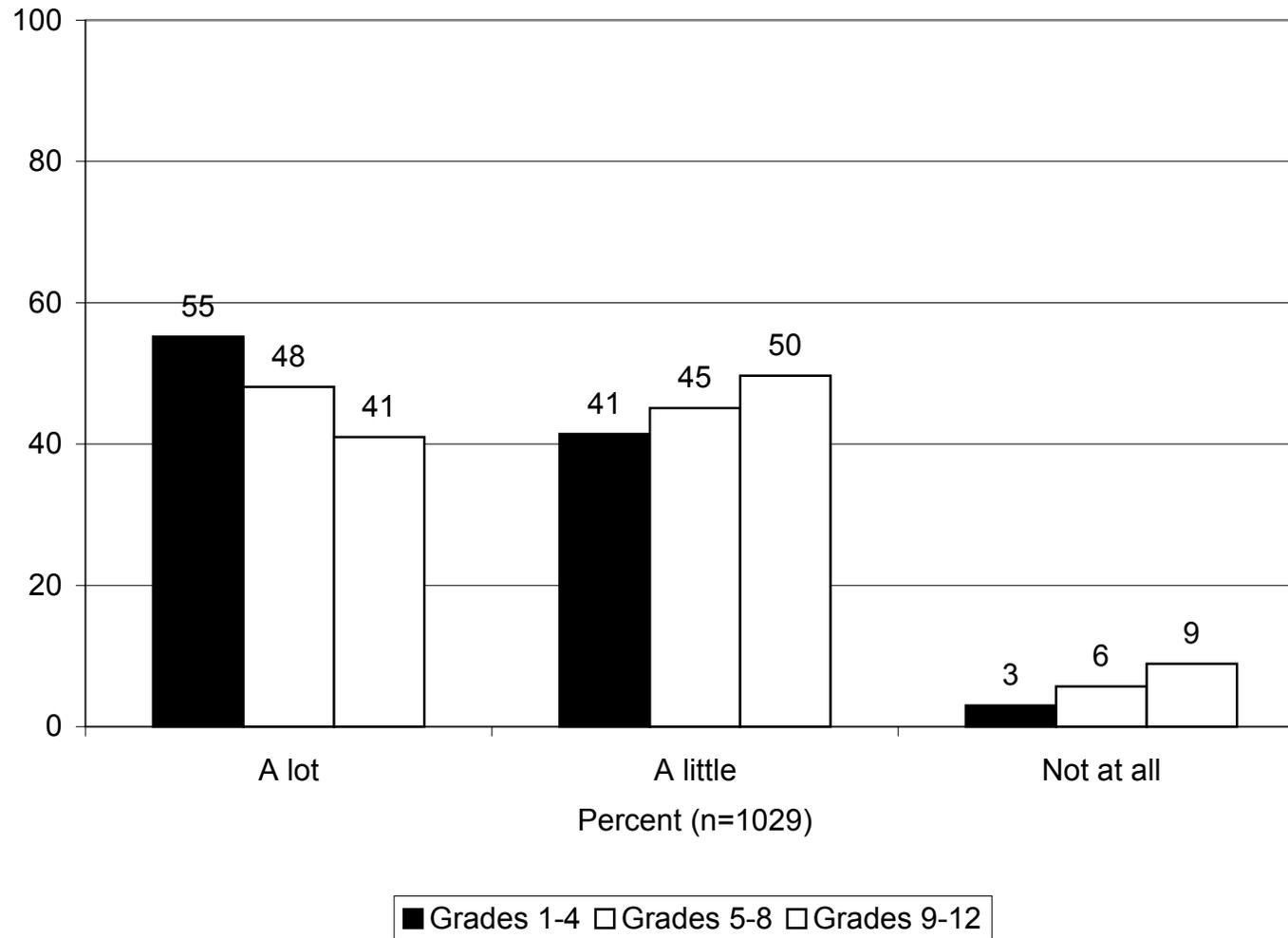
Q8. Cont'd. Activities participated in within the past 12 months. By Grade Cohort.



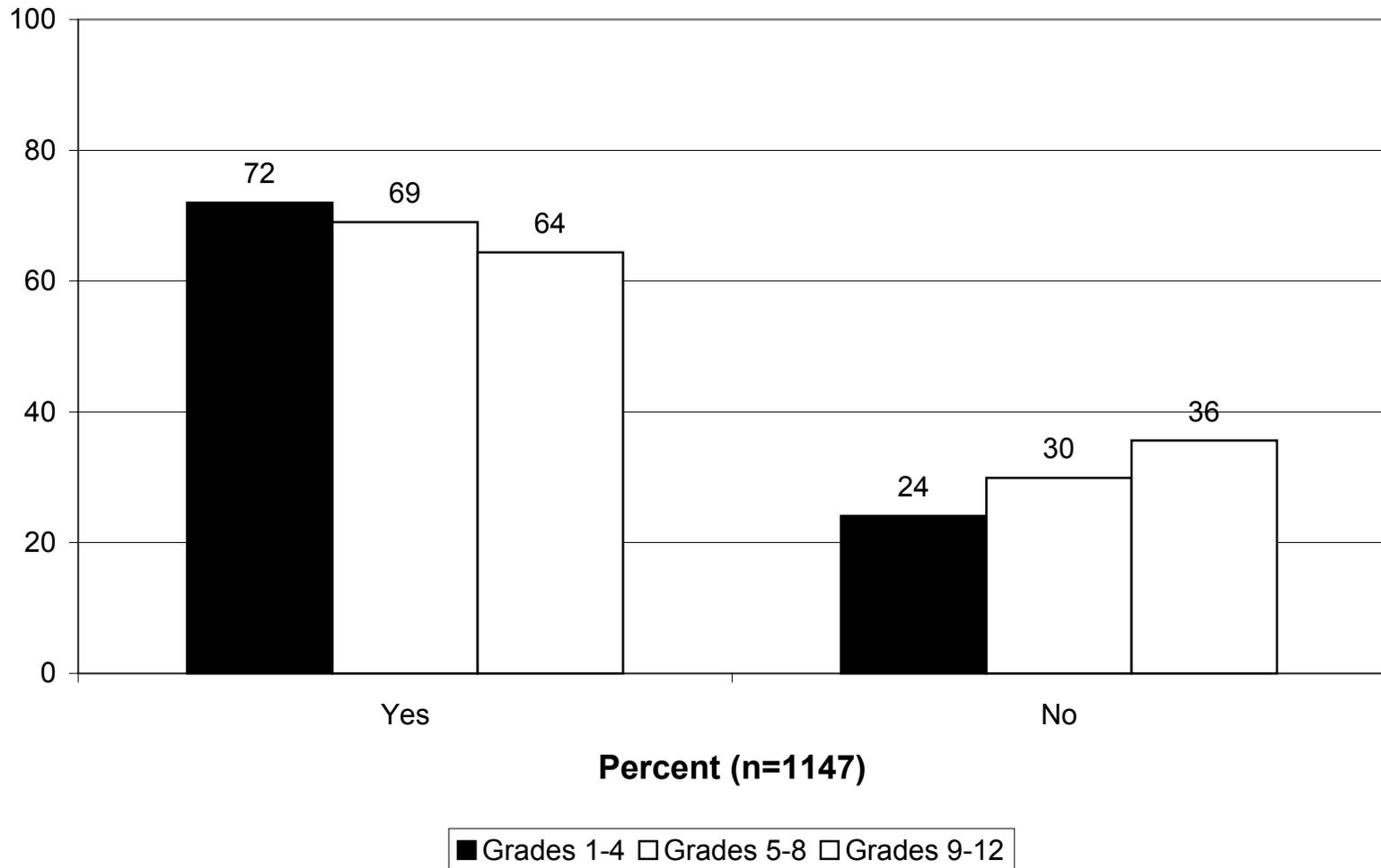
Q9. Have you ever gone fishing in your life? By Grade Cohort.



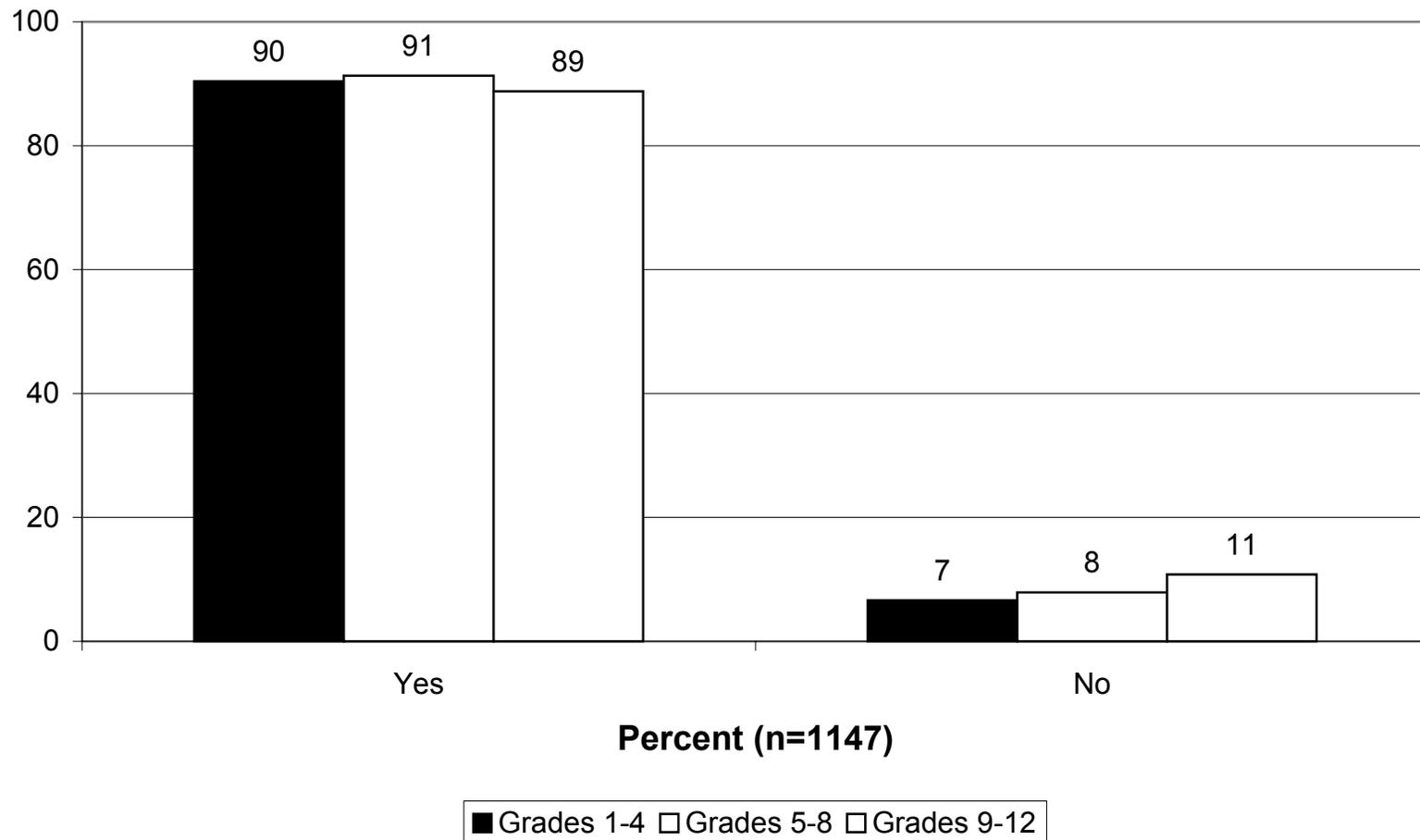
**Q10. Would you say you like fishing a lot, a little, or not at all?
(asked of those who reported having gone fishing in their life). By
Grade Cohort.**



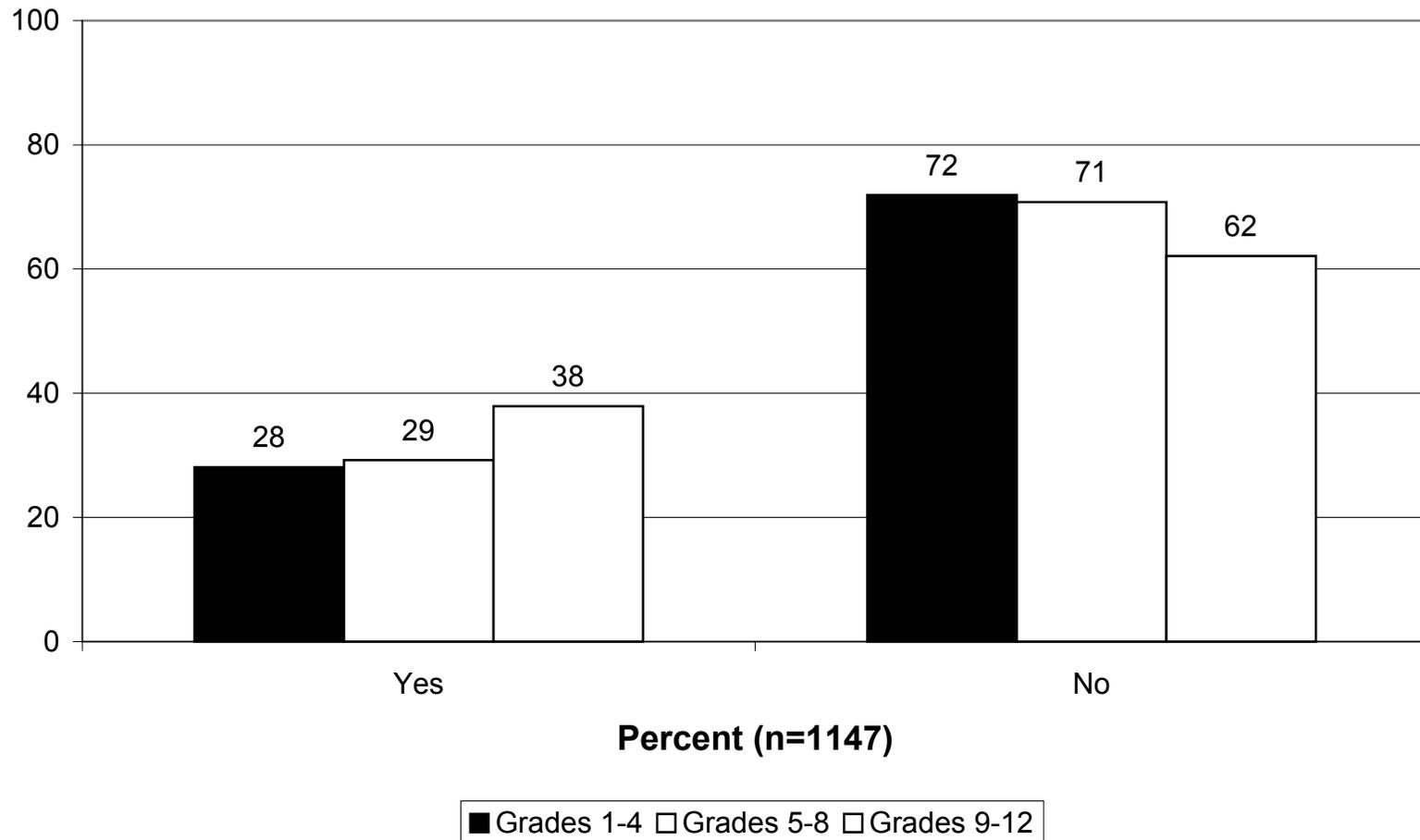
**Q11. Have you gone fishing within the past 12 months?
(asked of those who reported having gone fishing in their
life). By Grade Cohort.**



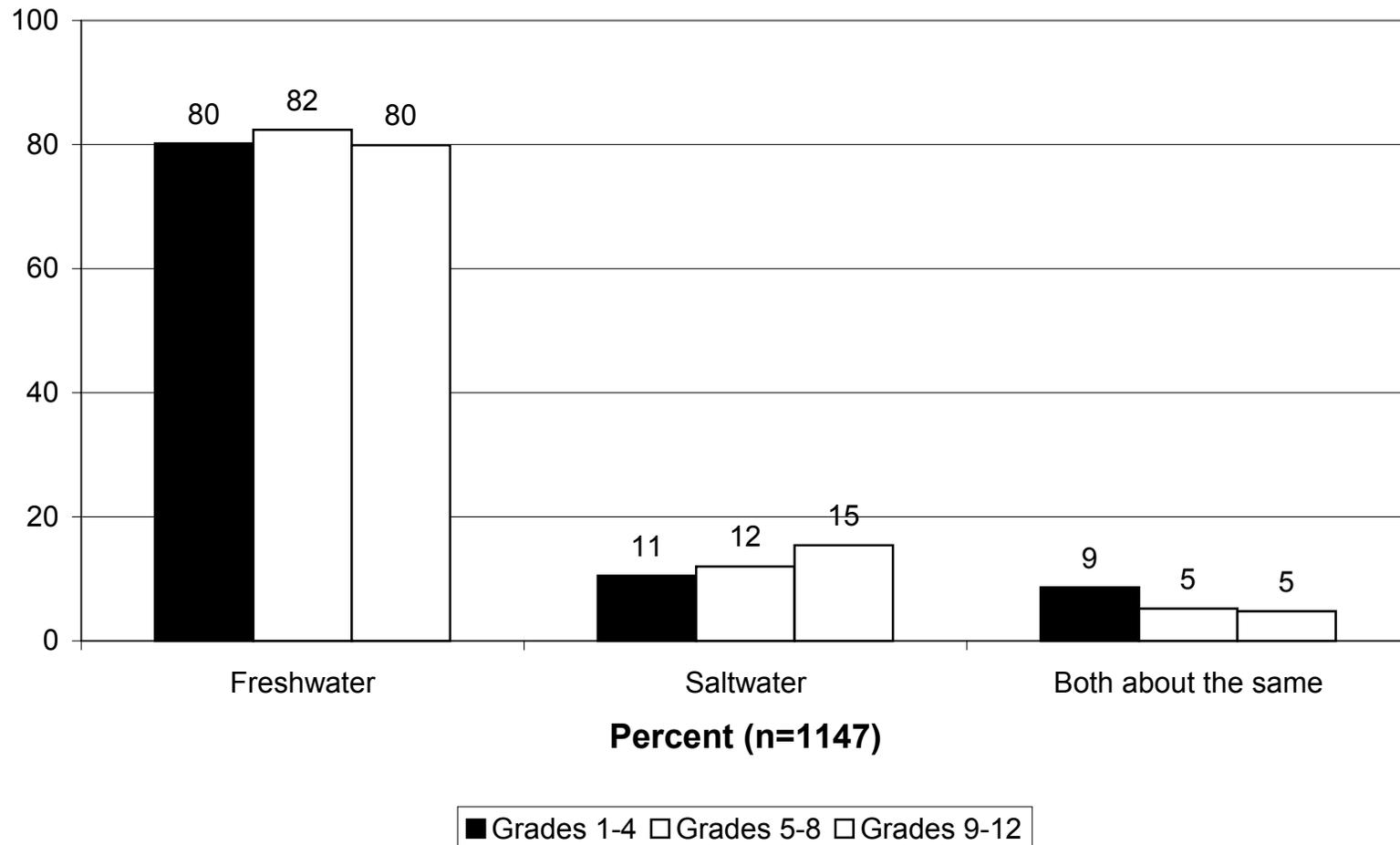
Q12. Within the past 12 months, did you go fishing in freshwater, like in ponds, lakes, streams, or reservoirs? (asked of those who have fished in the last 12 months). By Grade Cohort.



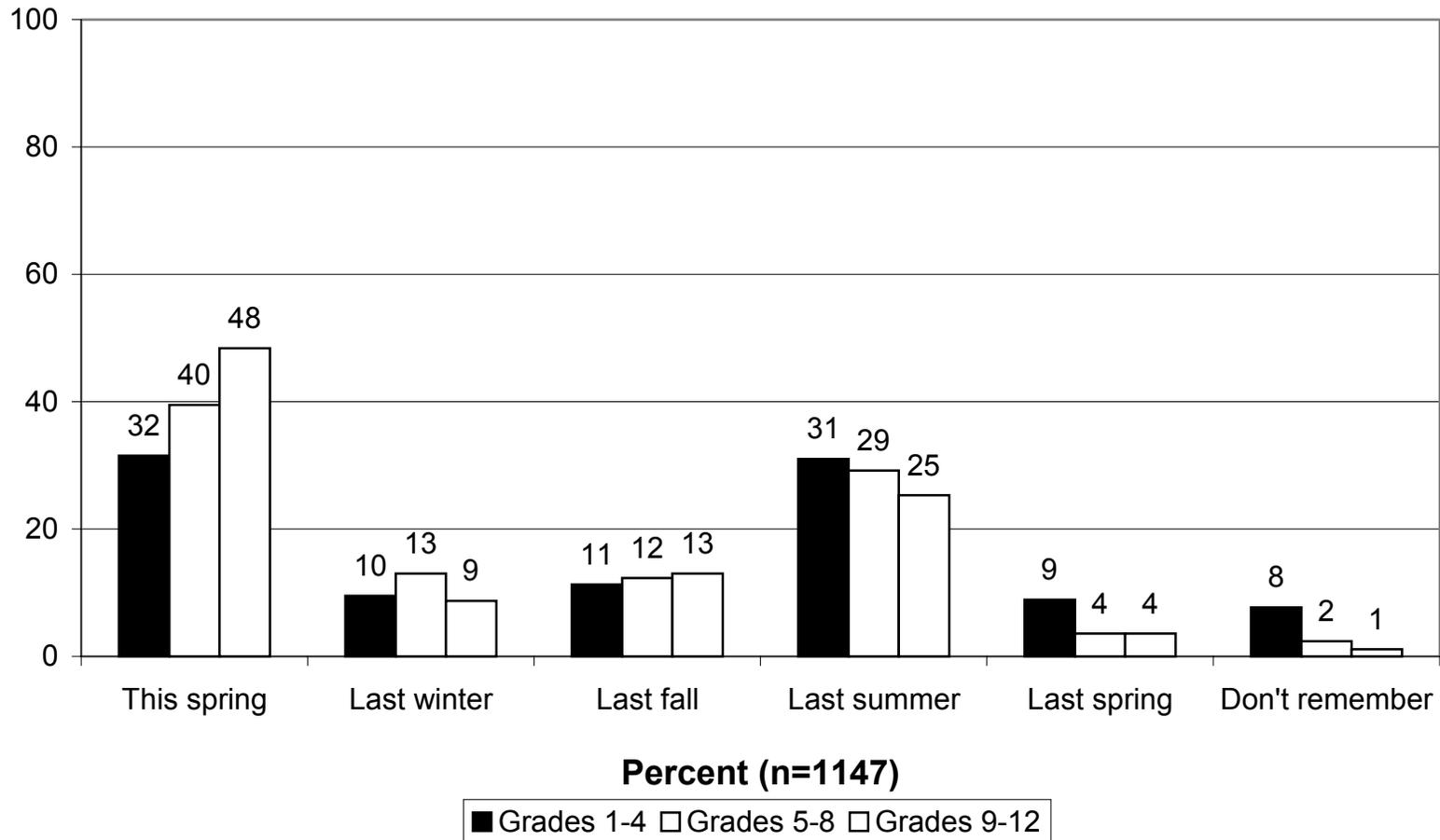
**Q13. Within the past 12 months, did you go fishing in saltwater, such as at the beach or in the ocean? (asked of those who have fished in the last 12 months).
By Grade Cohort.**



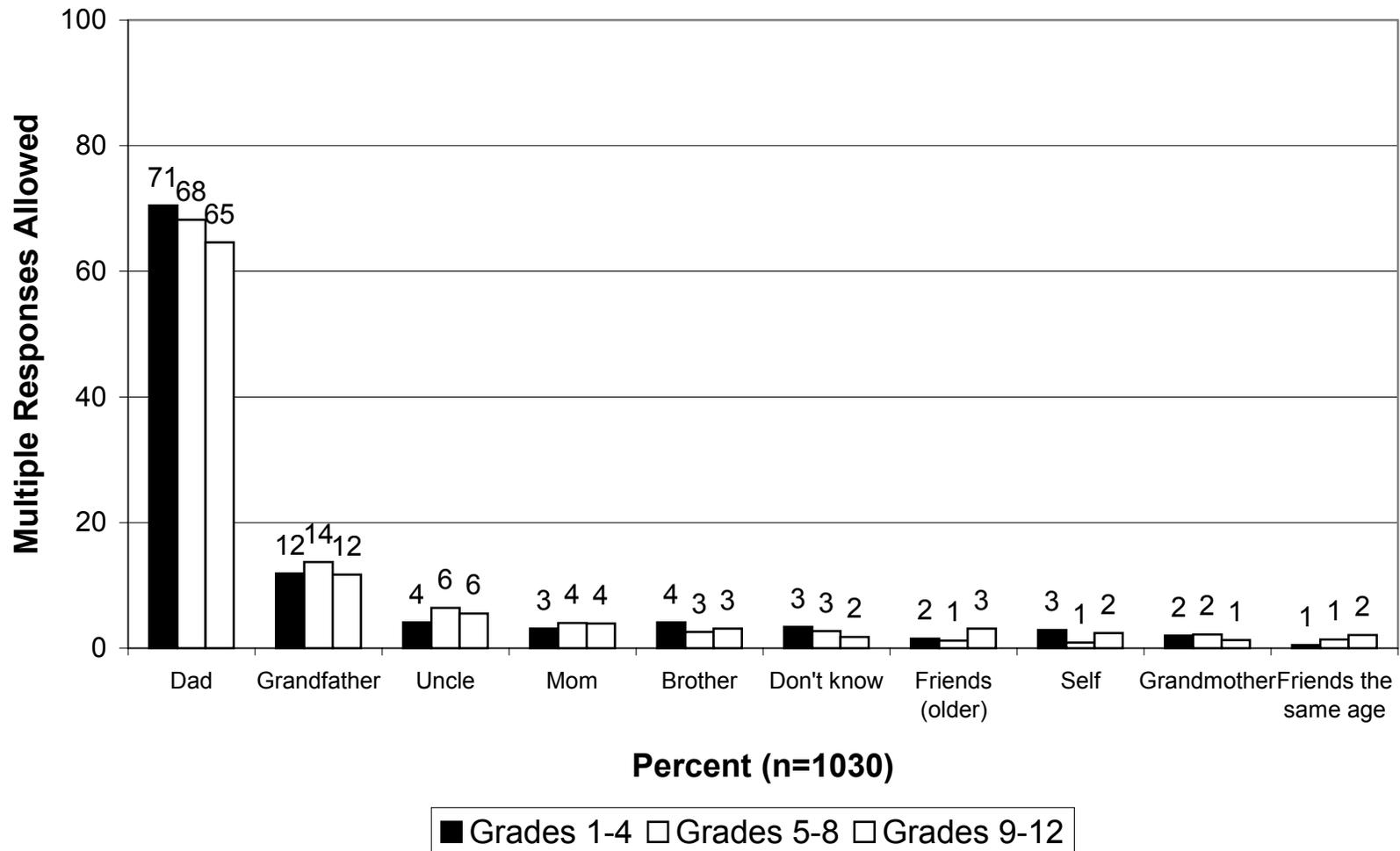
Q14. Which do you do more: Fish in freshwater or in saltwater, or do you do both about the same? (asked of those who either saltwater or freshwater fished in the last 12 months). By Grade Cohort.



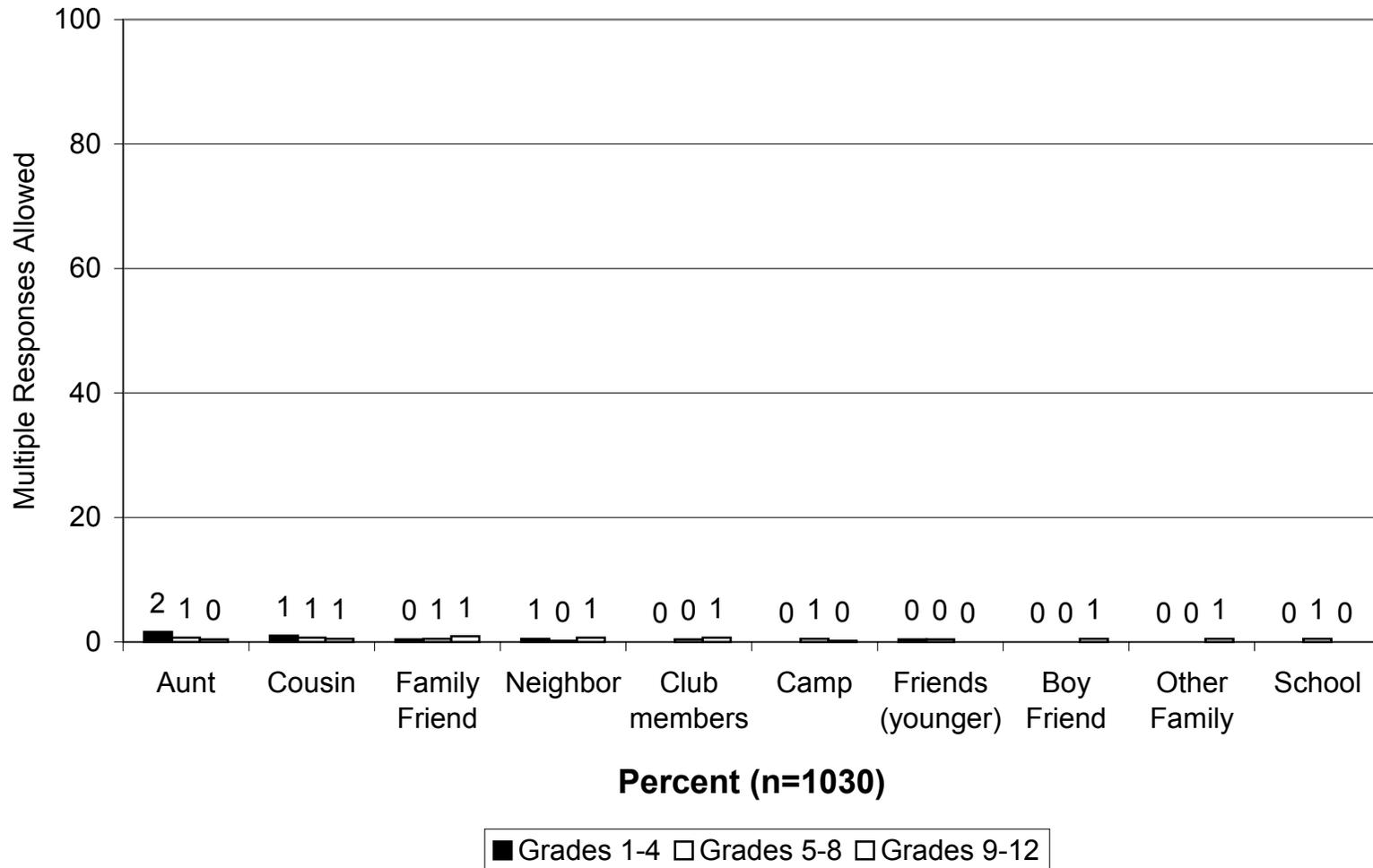
Q15. When was the last time you went fishing? Did you go this spring, this last winter, last fall, last summer or last spring? (asked of those who have fished in the last 12 months). By Grade Cohort.



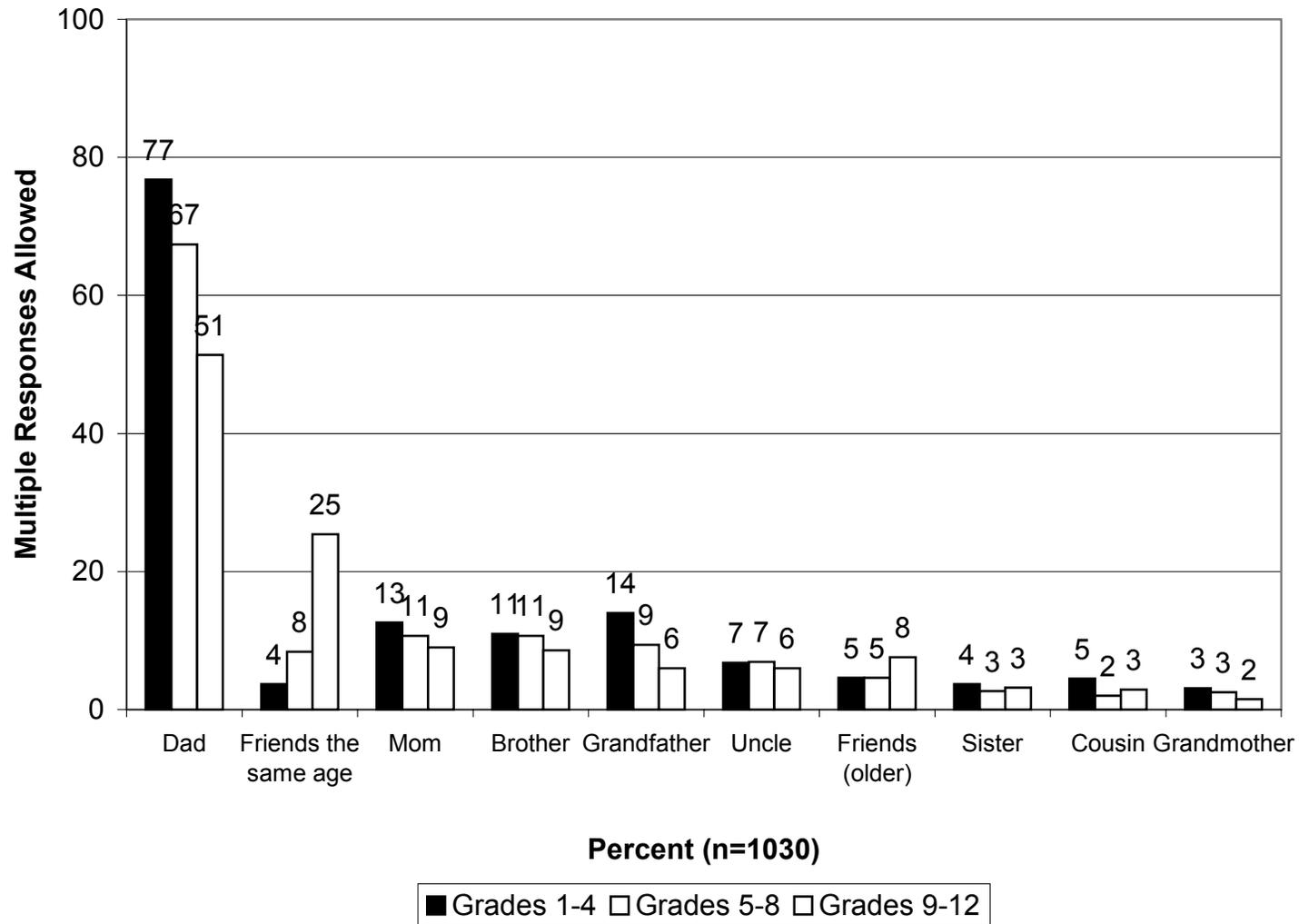
**Q18. Who FIRST taught you how to fish?
(asked of those who reported having gone fishing in their
life). By Grade Cohort.**



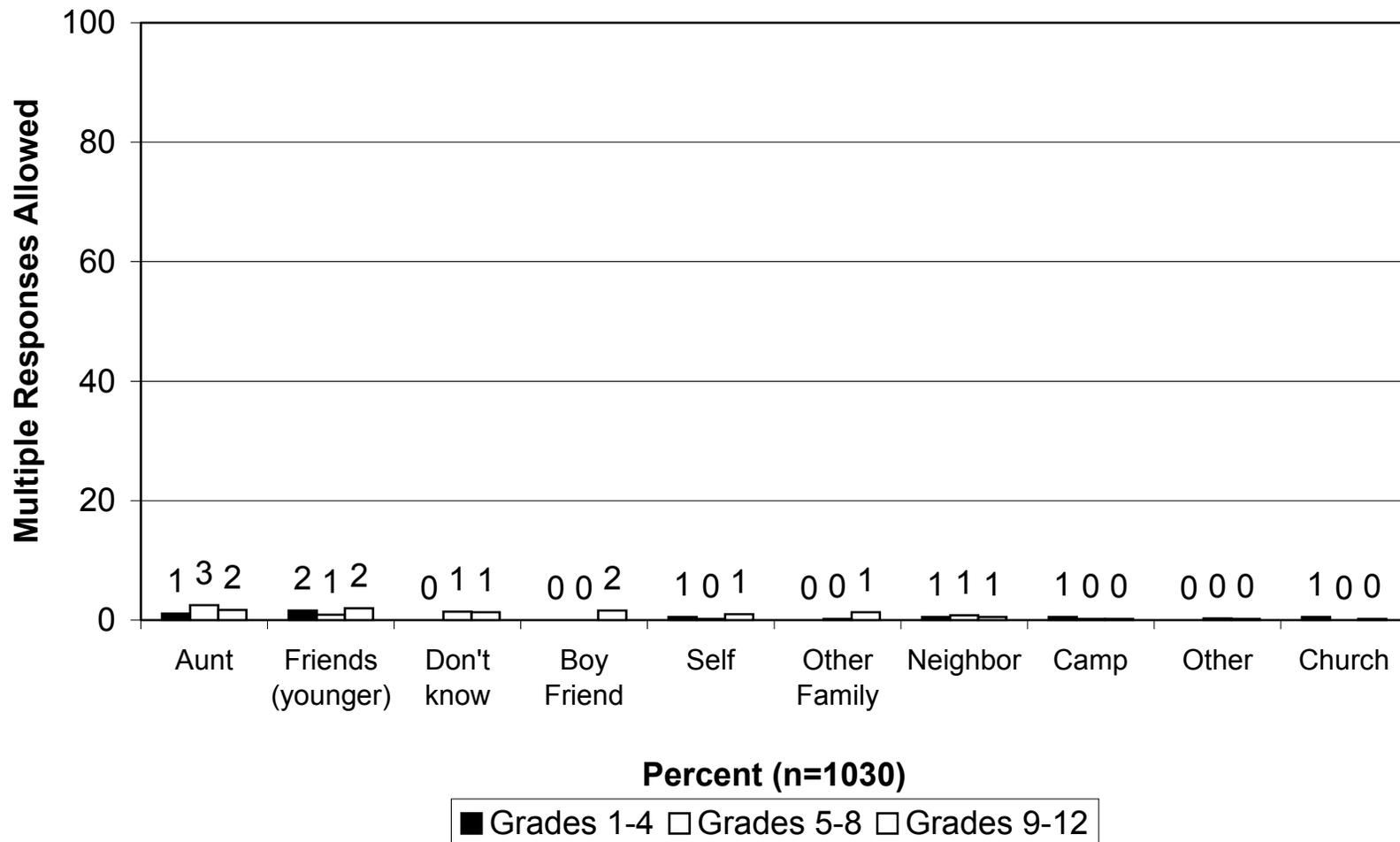
**Q18. Cont'd. Who FIRST taught you how to fish?
(asked of those who reported having gone fishing in their
life). By Grade Cohort.**



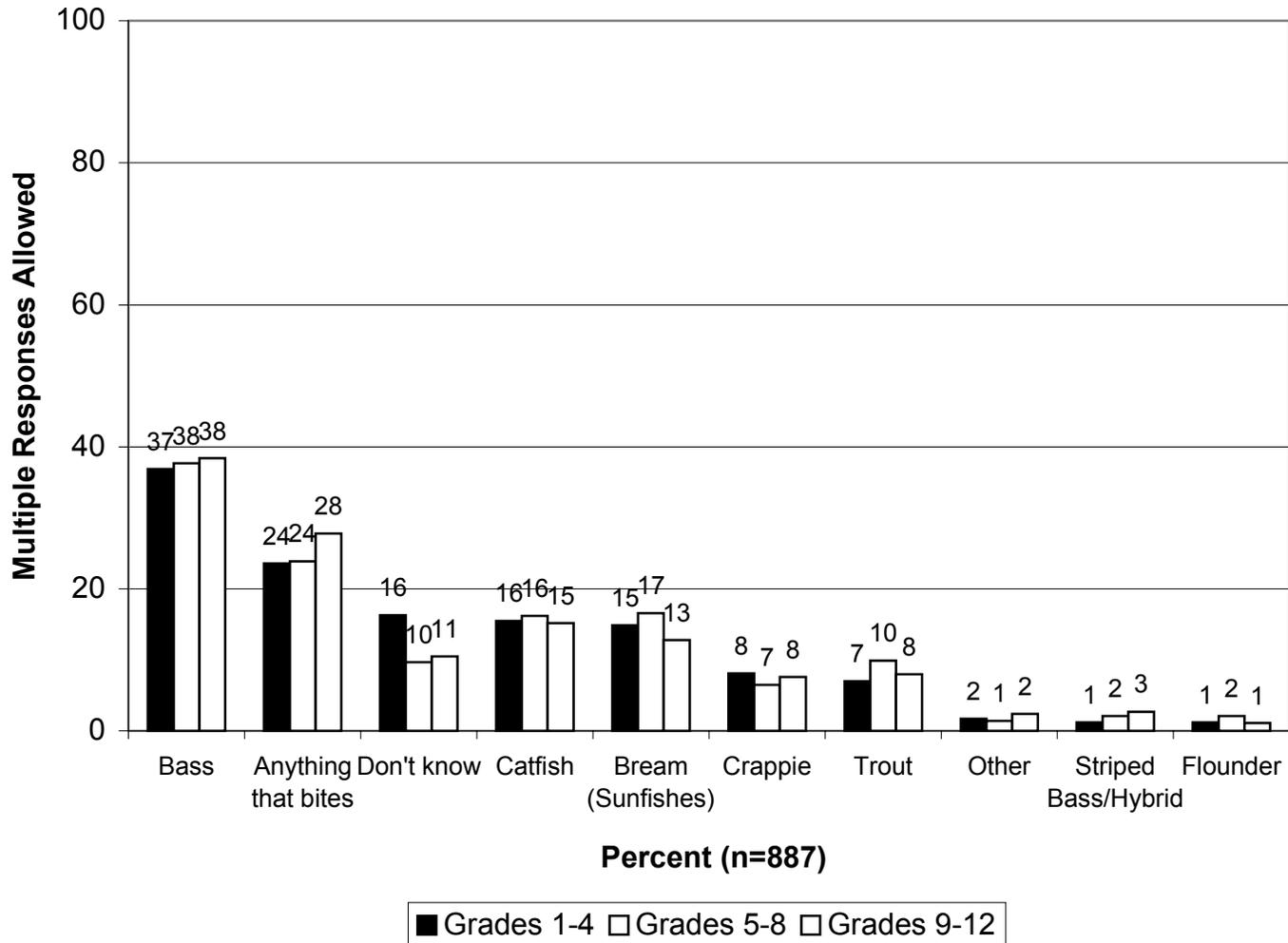
**Q21. WHO do you usually go fishing with?
(asked of those who reported having gone fishing in their life). By
Grade Cohort.**



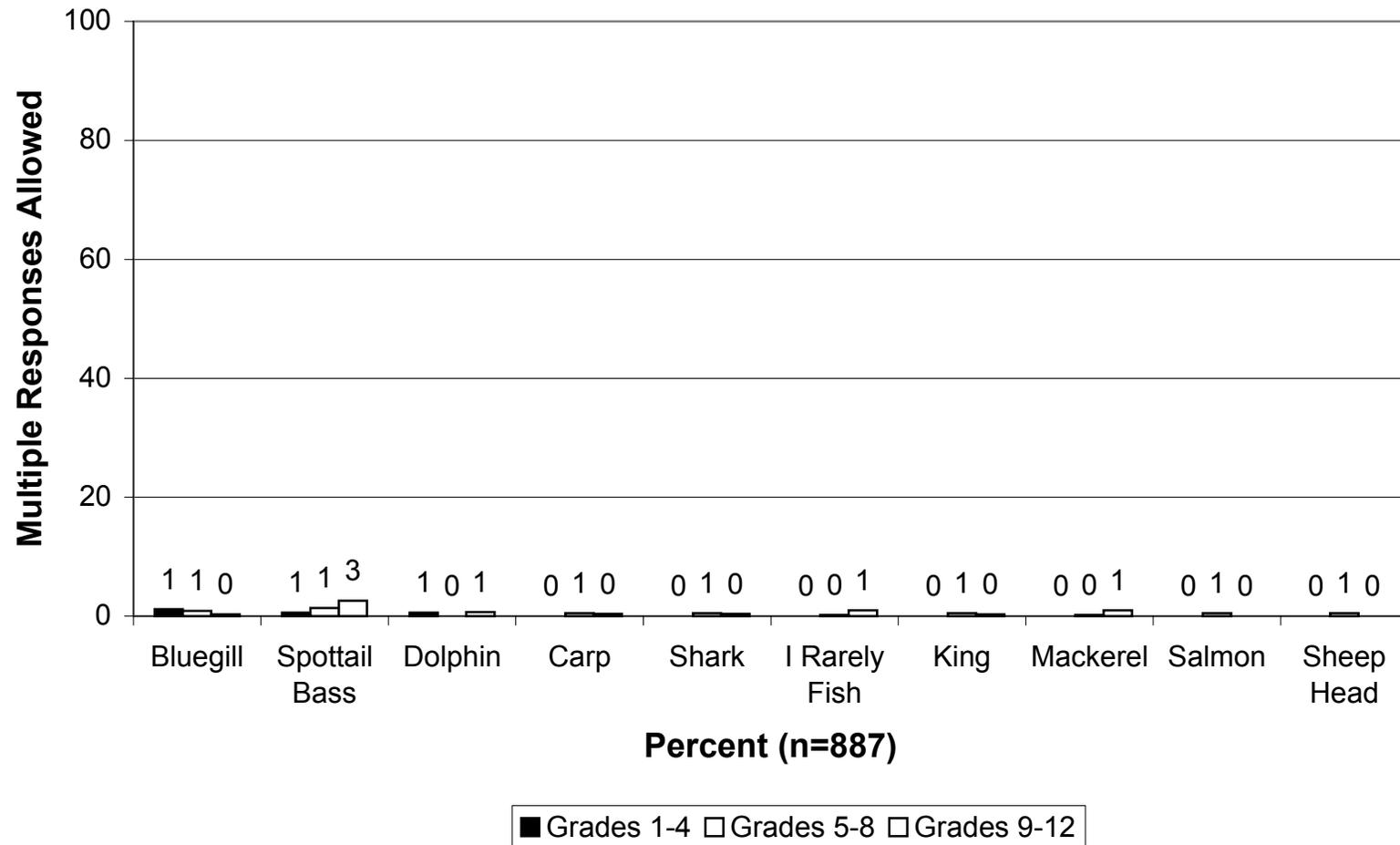
Q21. Cont'd. WHO do you usually go fishing with? (asked of those who reported having gone fishing in their life). By Grade Cohort.



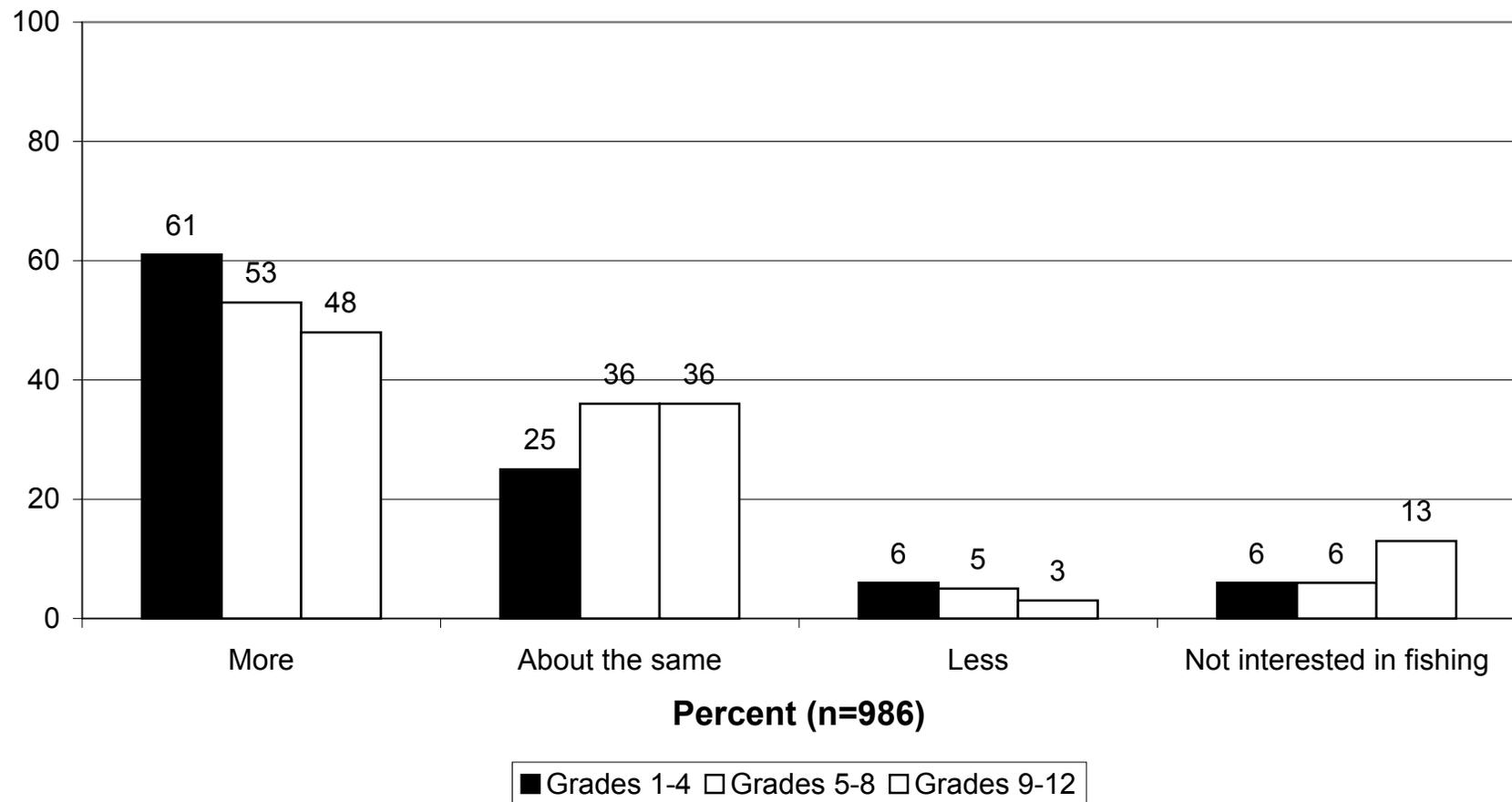
**Q24. What kind of fish do you usually fish for? (asked of those who reported having gone fishing in their life).
By Grade Cohort.**



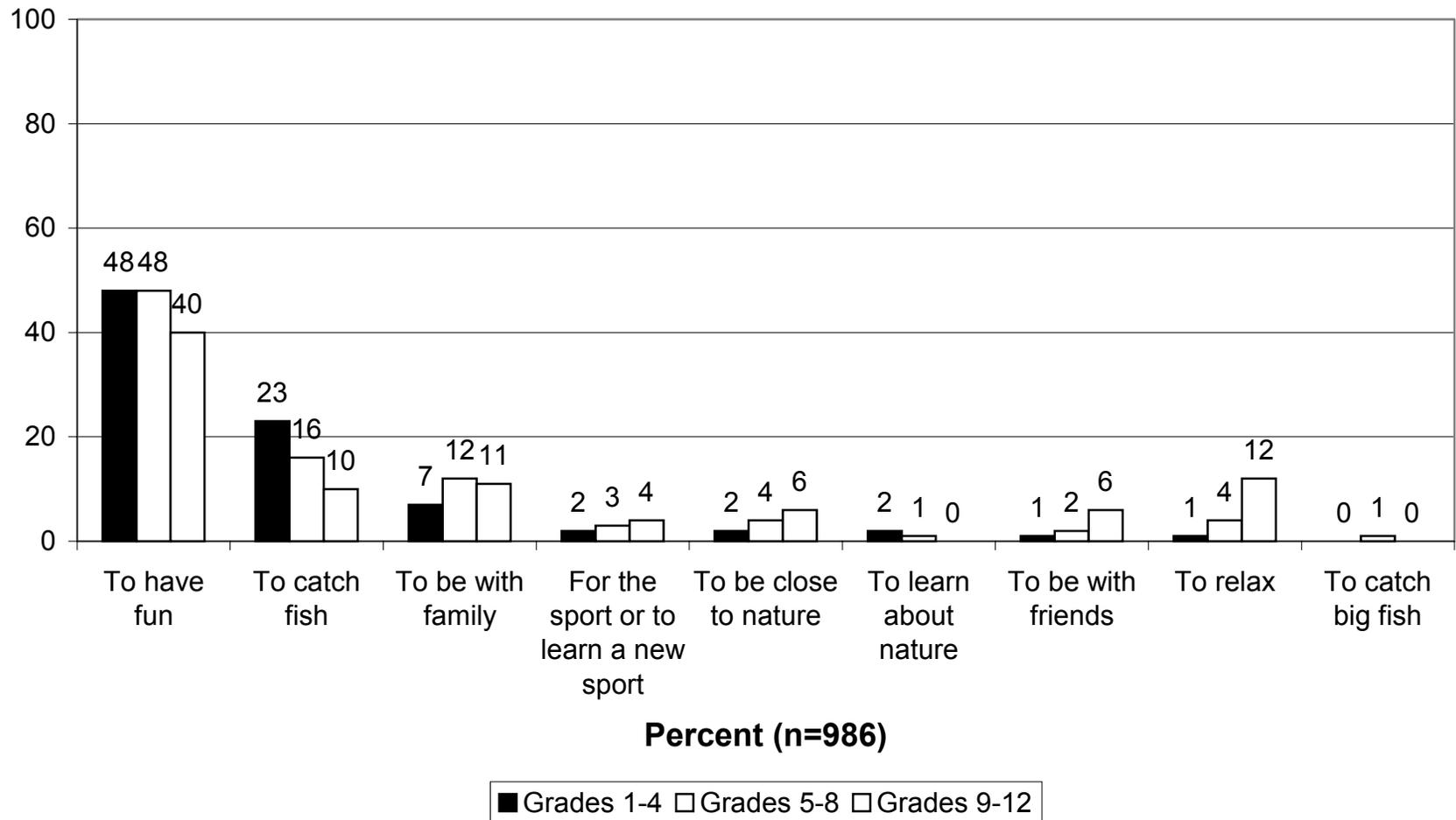
**Q24. Cont'd. What kind of fish do you usually fish for?
(asked of those who reported having gone fishing in their
life). By Grade Cohort.**



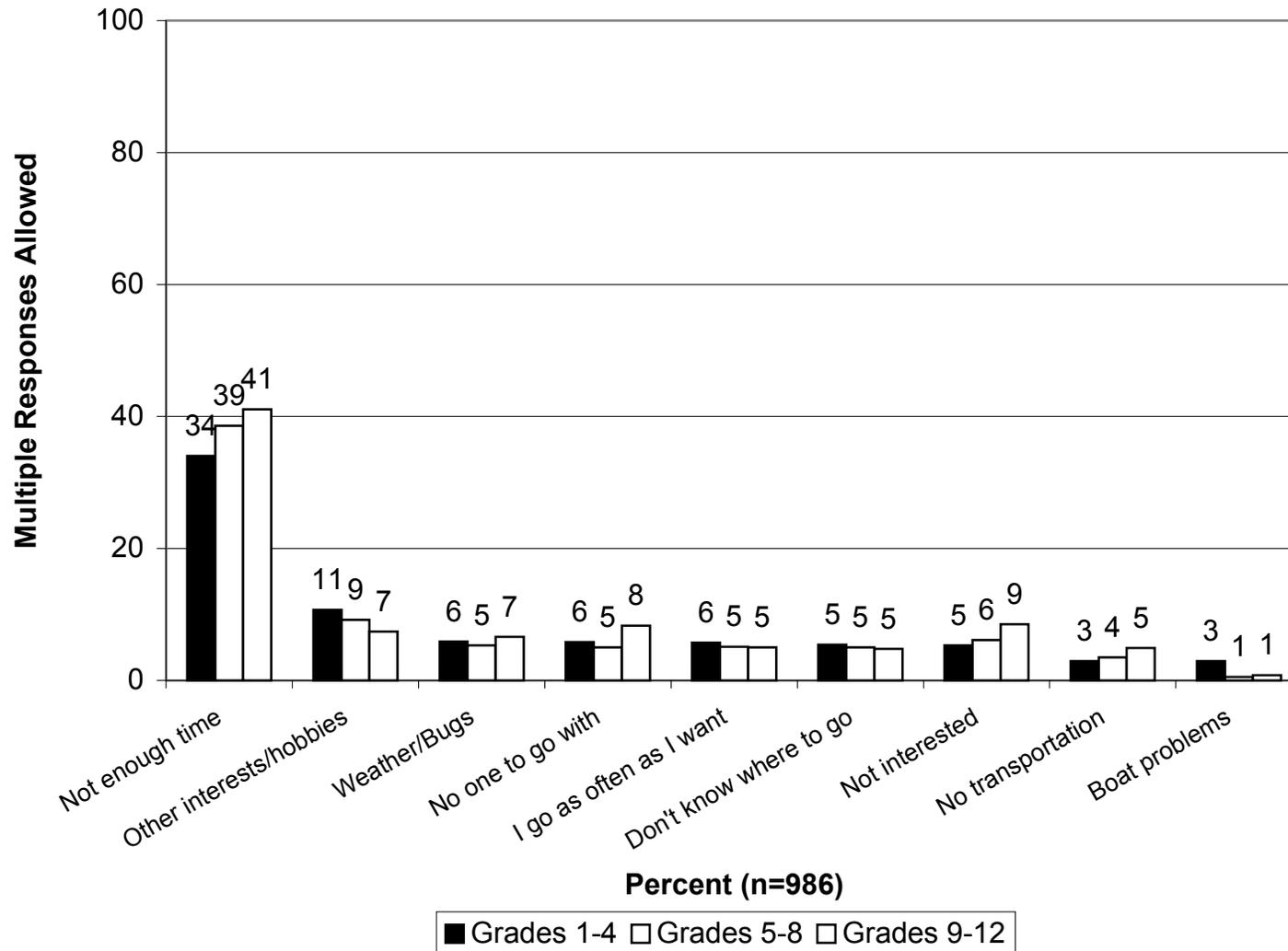
**Q26. If you could change how much you go fishing, would you go fishing more, about the same, or less? Or are you not interested in going fishing? (Asked of all respondents)
By Grade Cohort.**



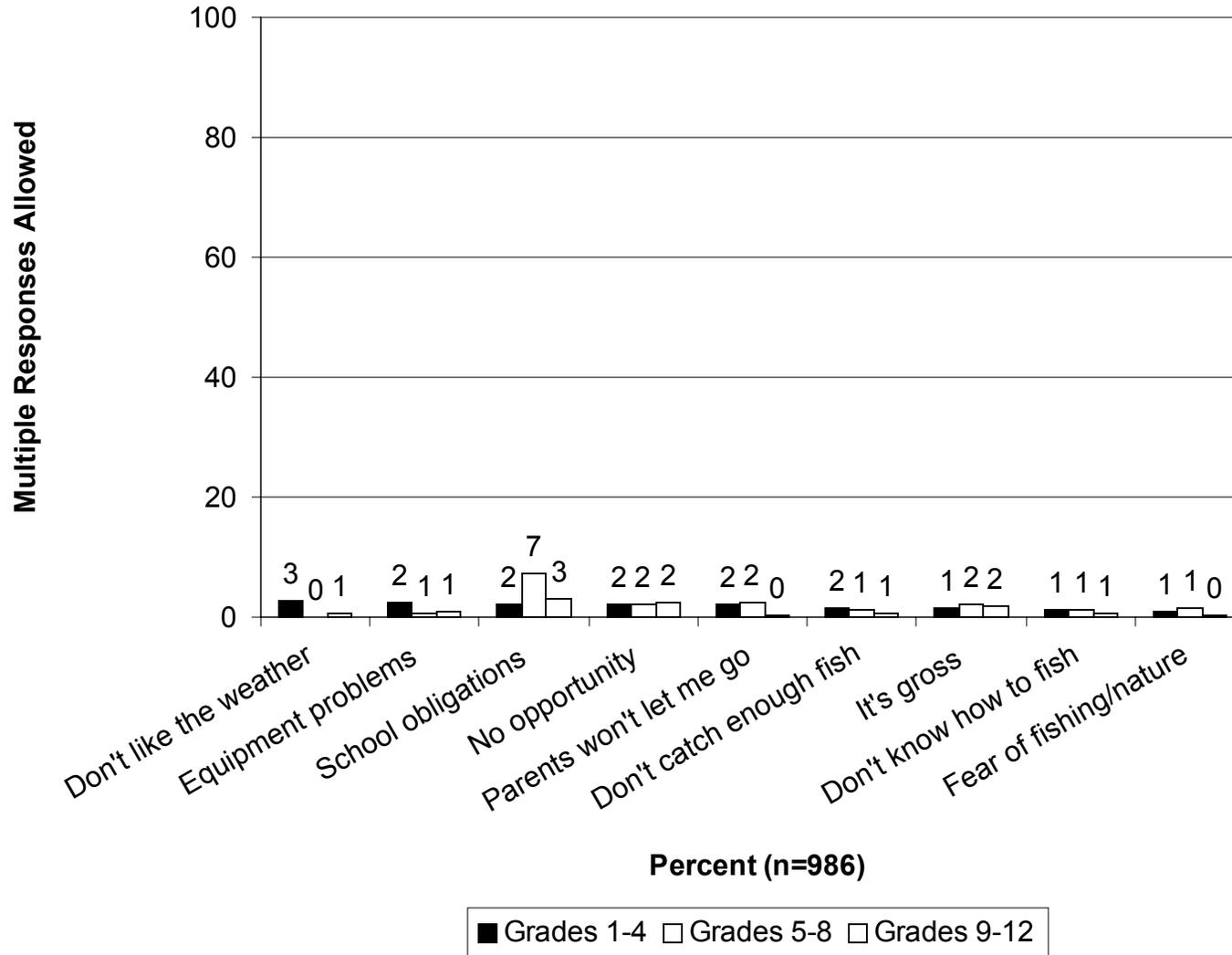
**Q27. What is the main reason why you would go fishing?
(unprompted: categories not read. respondent's single
most important reason) By Grade Cohort.**



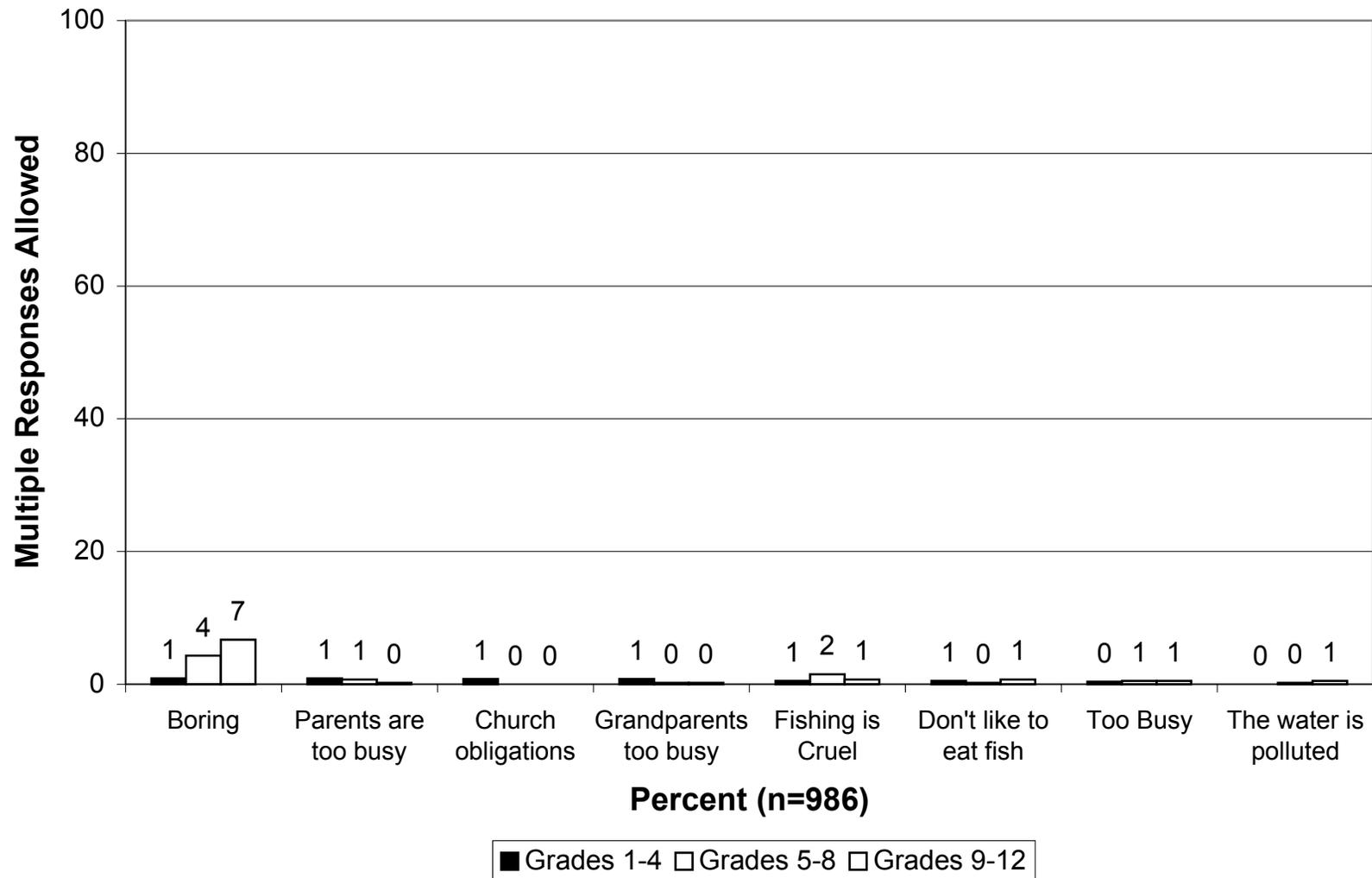
Q29. In general, what are some of the reasons why you don't go fishing more often? By Grade Cohort.



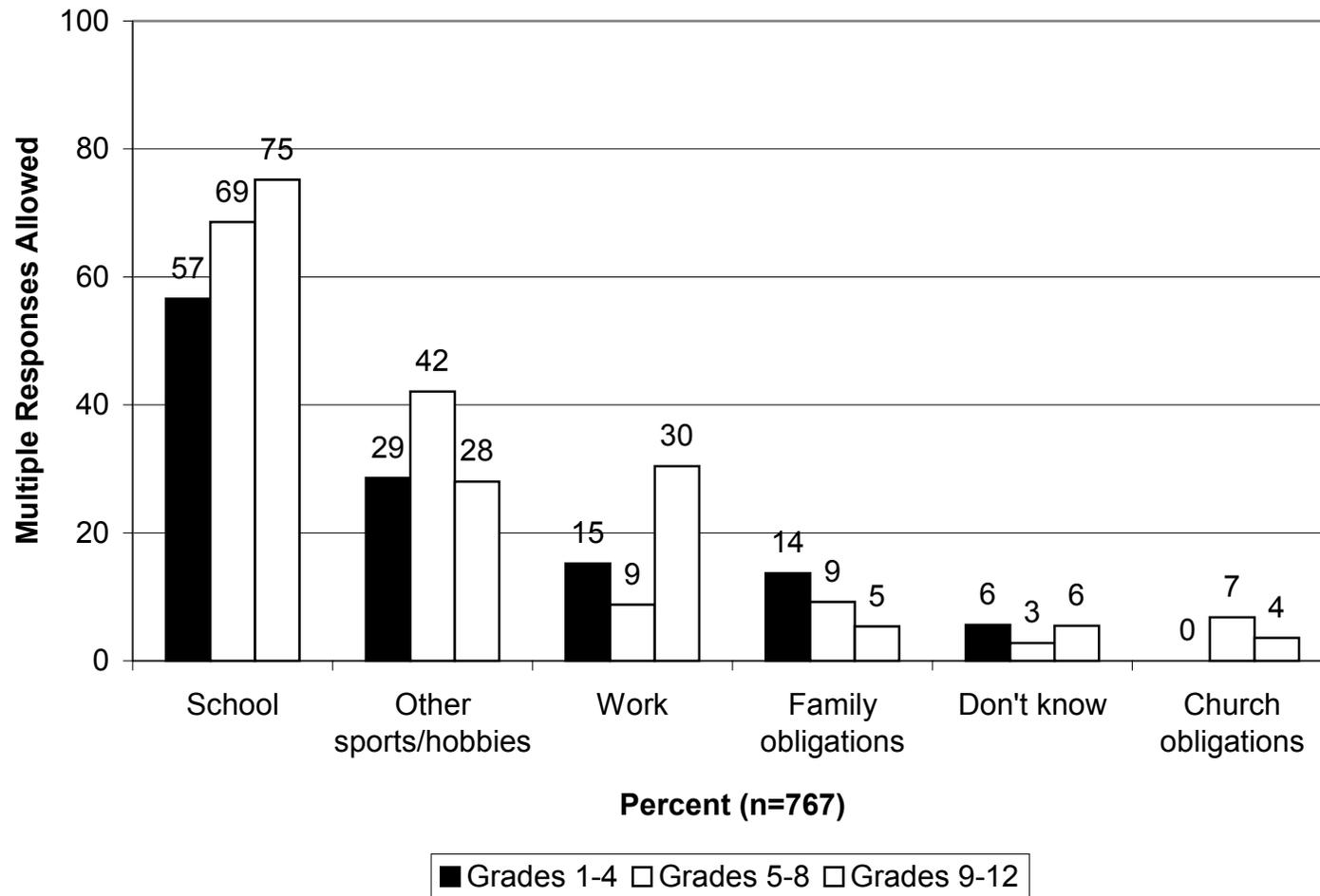
Q29. Cont'd. In general, what are some of the reasons why you don't go fishing more often? By Grade Cohort.



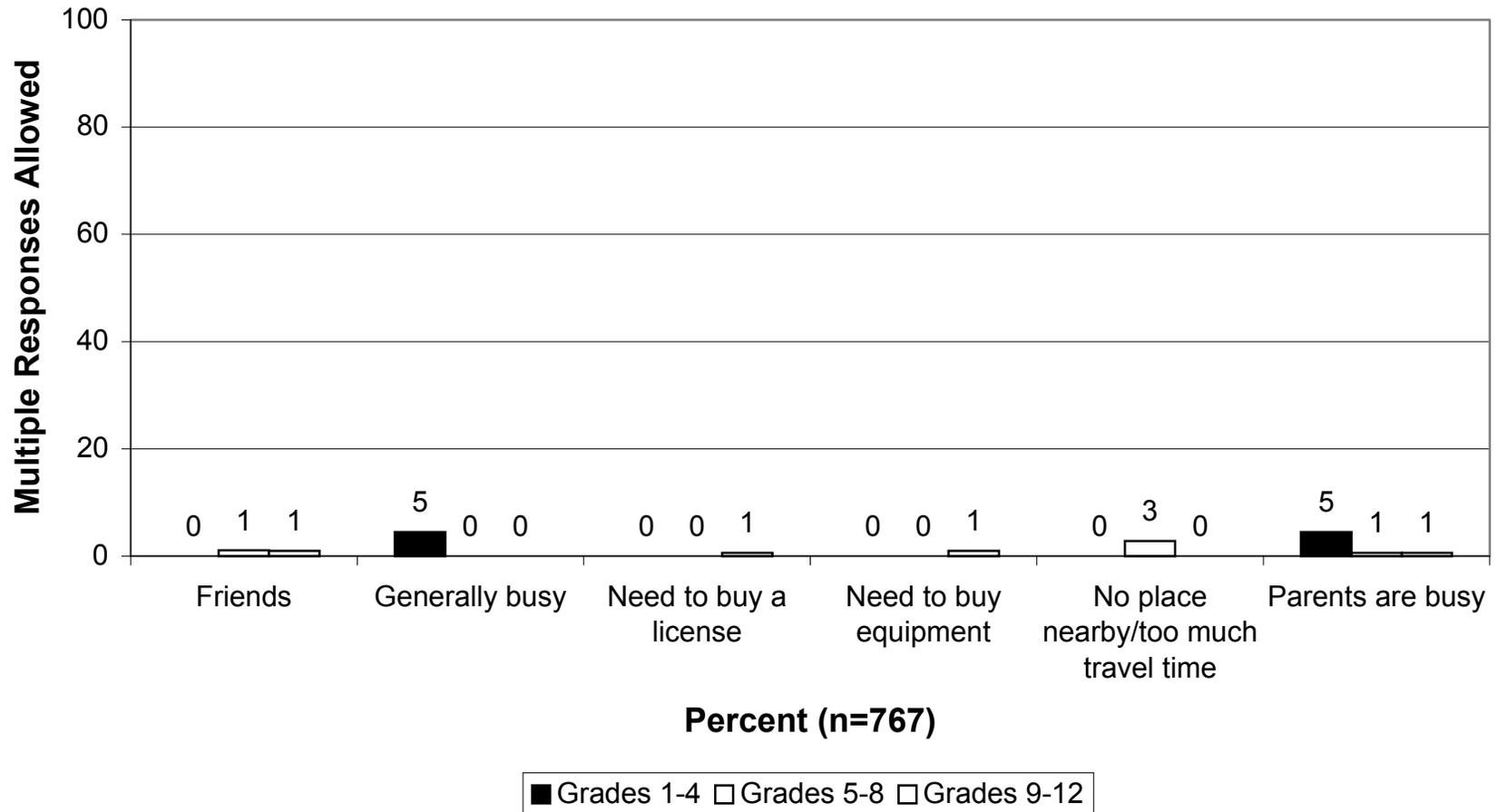
Q29. Cont'd. In general, what are some of the reasons why you don't go fishing more often? By Grade Cohort.



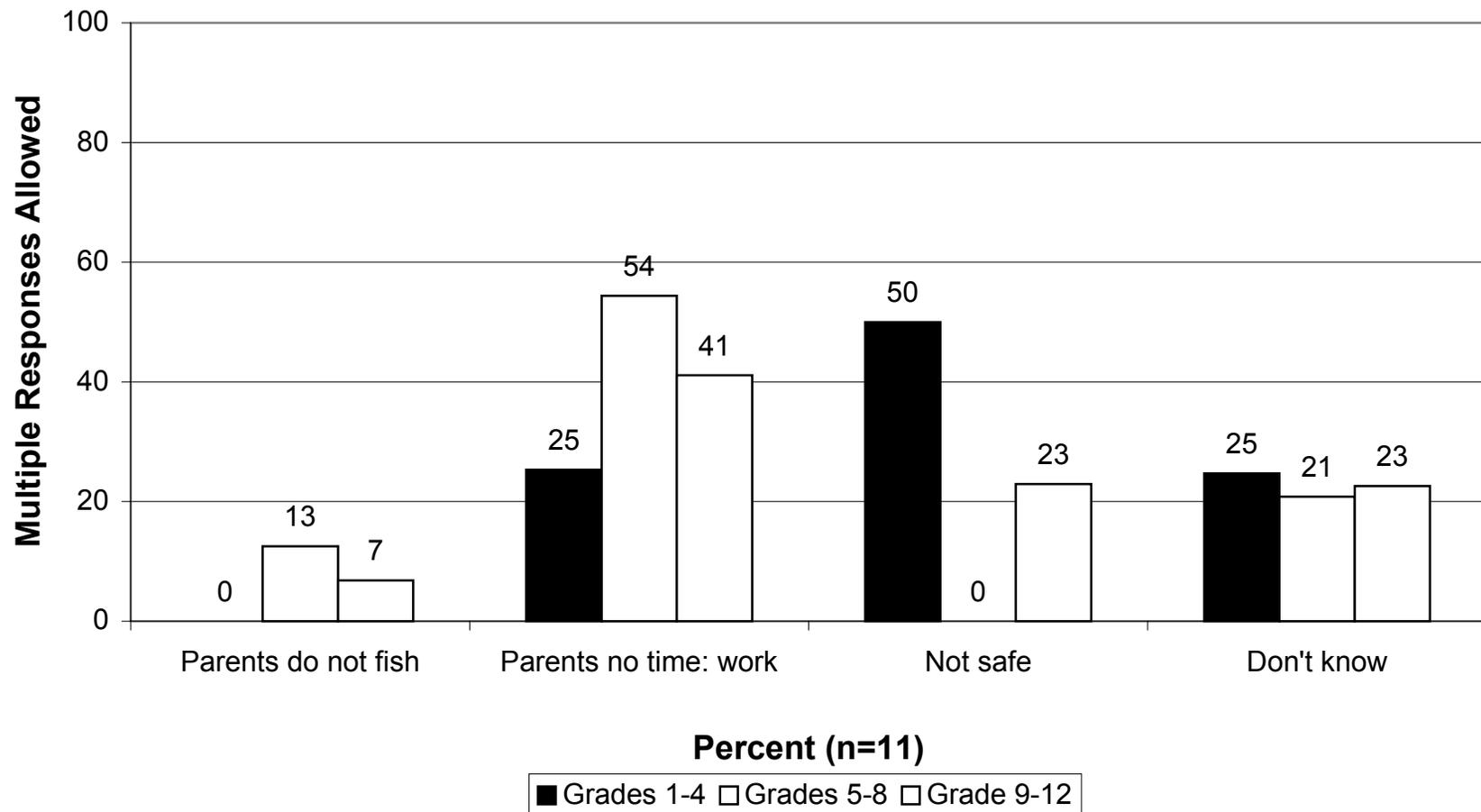
Q32. What are specific reasons you don't have enough time to go fishing? (asked of those who reported "not enough time" as a reason they do not go fishing). By Grade Cohort.



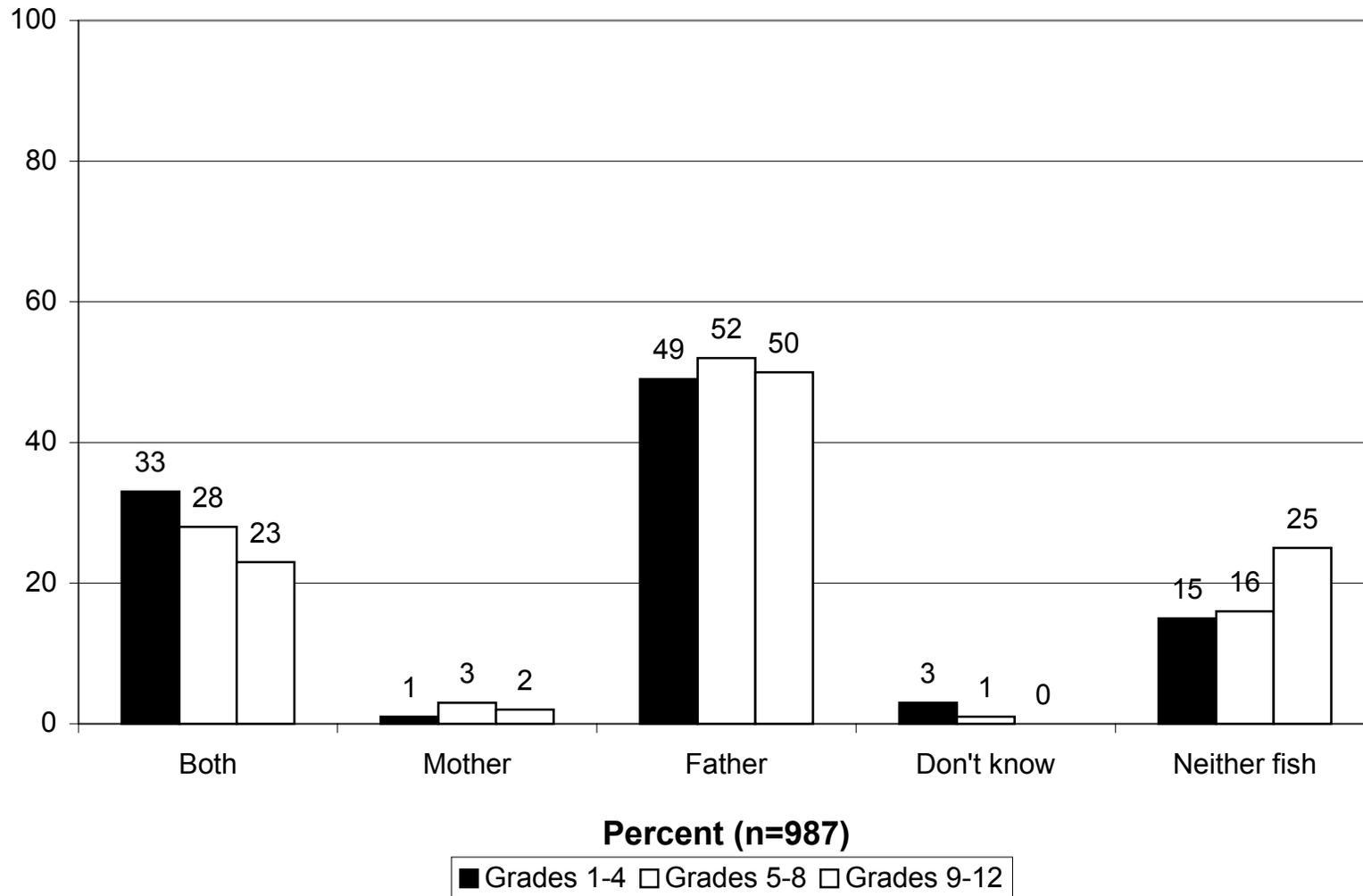
Q32. Cont'd. What are specific reasons you don't have enough time to go fishing? (asked of those who reported "not enough time" as a reason they do not go fishing). By Grade Cohort.



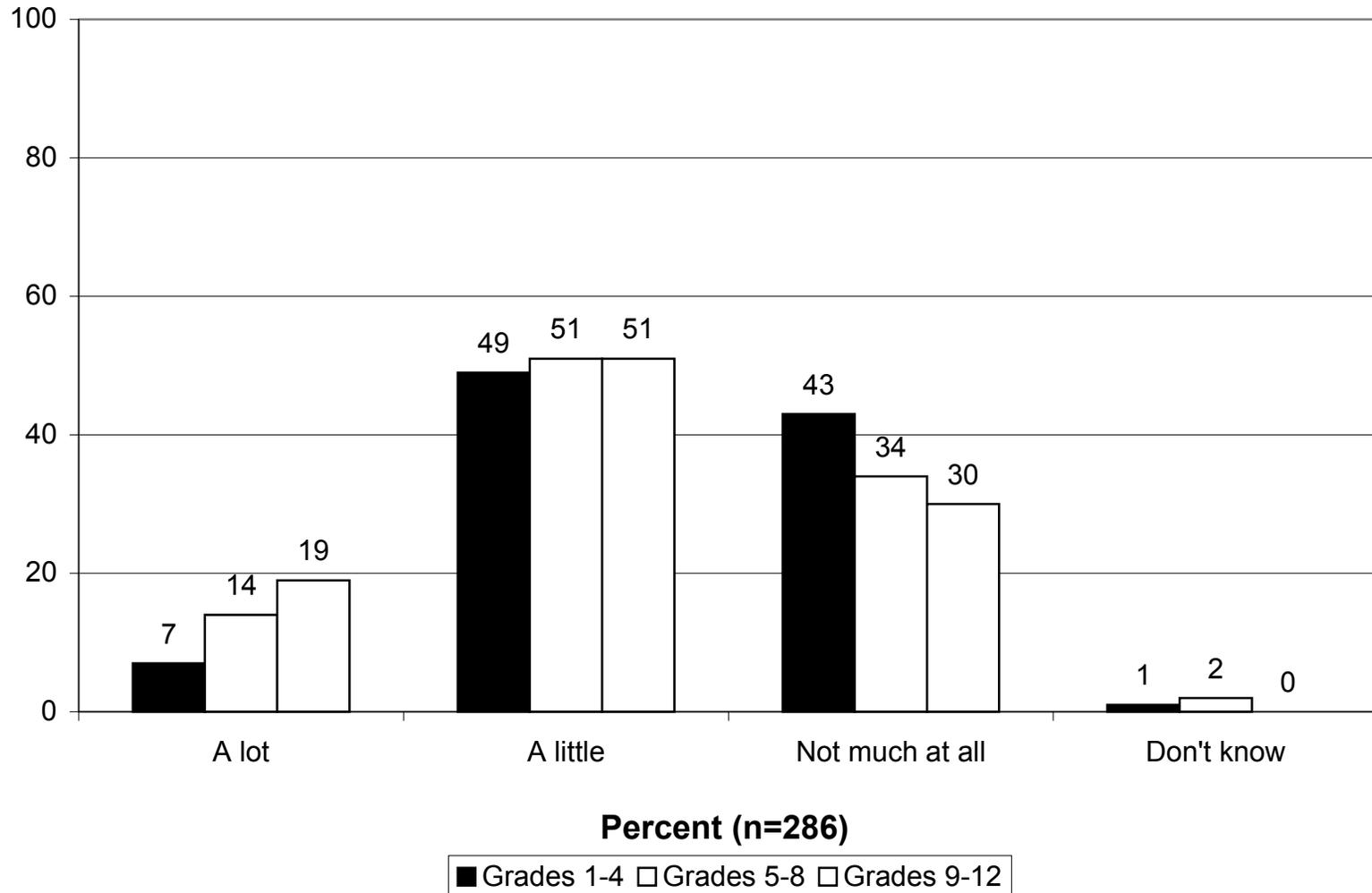
**Q35. You said your parents would not let you go fishing?
What, specifically, are the reasons for this? (asked of
those who's "parents will not let them go" fishing). By
Grade Cohort.**



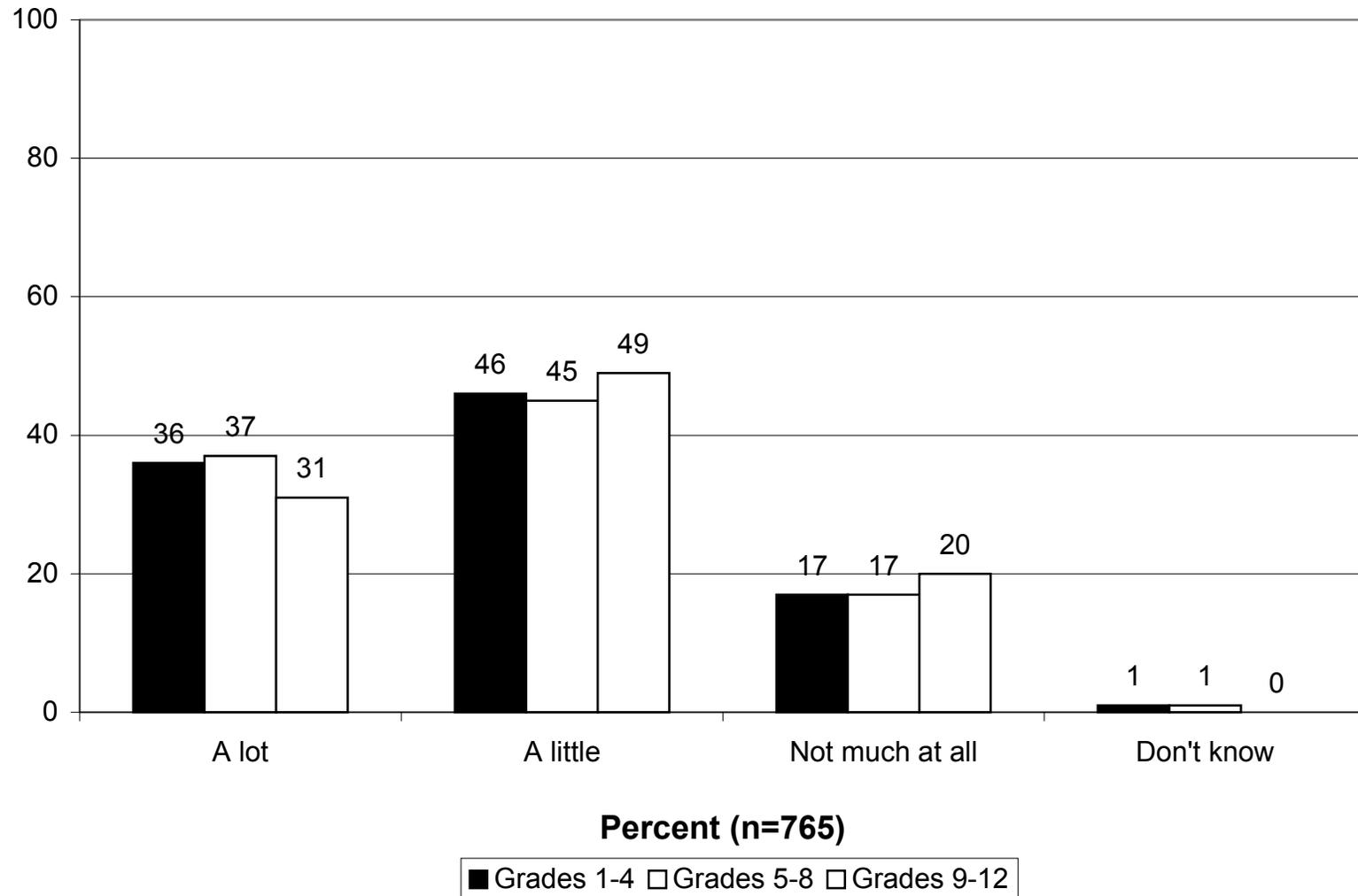
Q37. Do both of your parents fish, or does only your mother or your father fish? By Grade Cohort.



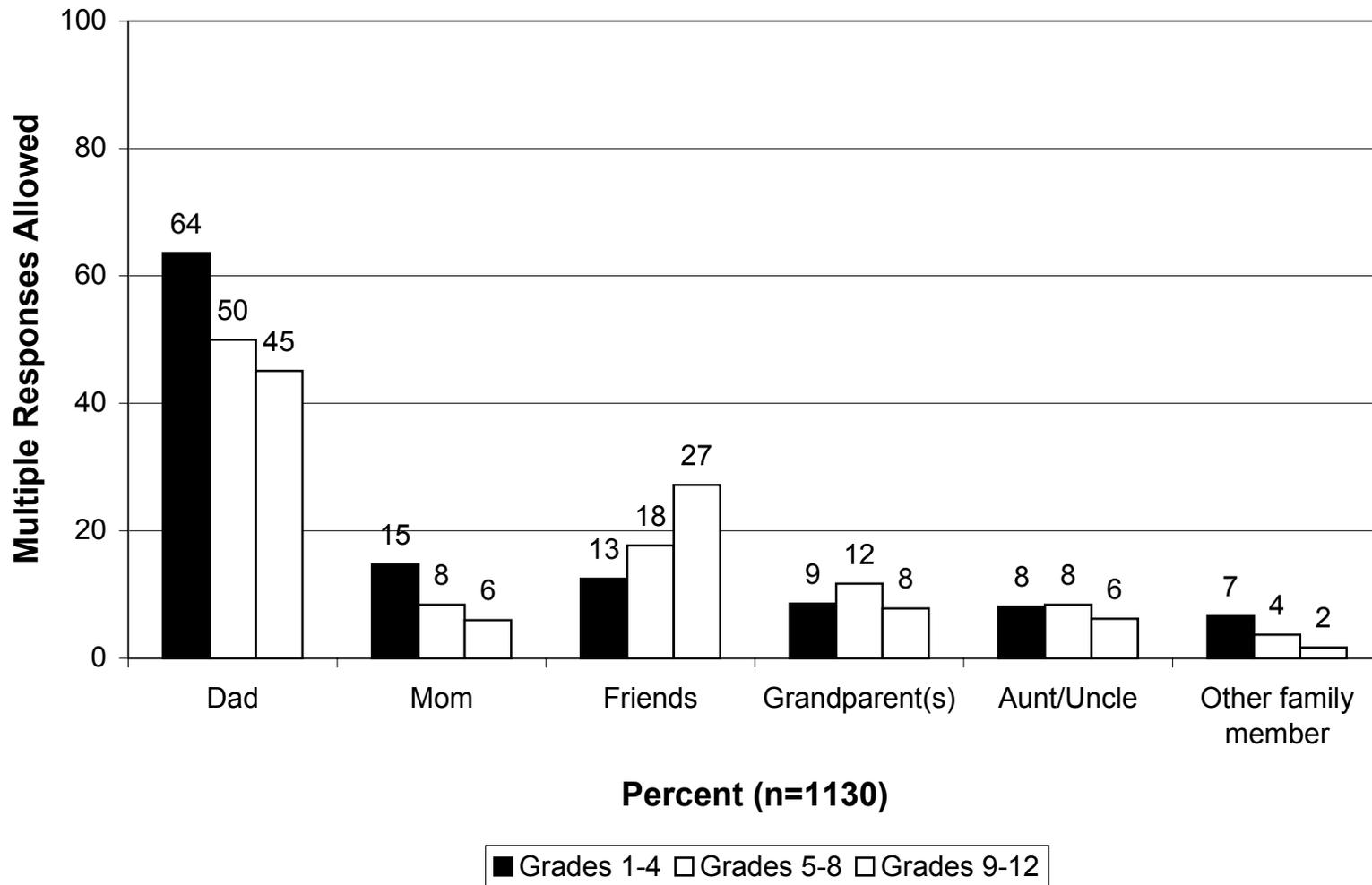
**Q38. Does your mom fish a lot, a little, or not much at all?
(asked of those whose mother fishes). By Grade Cohort.**



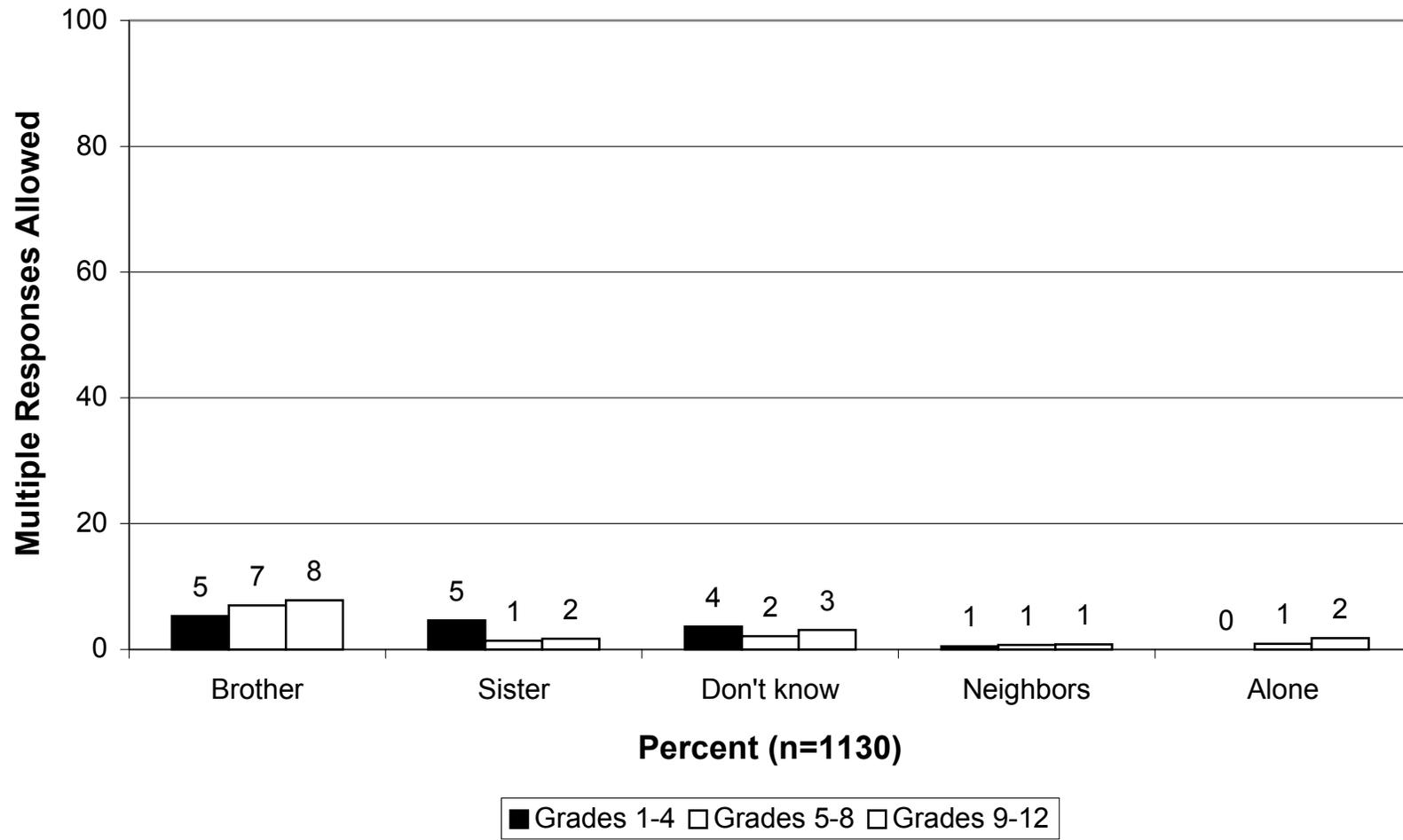
**Q39. Does your dad fish a lot, a little, or not much at all?
(asked of those whose dad fishes). By Grade Cohort.**



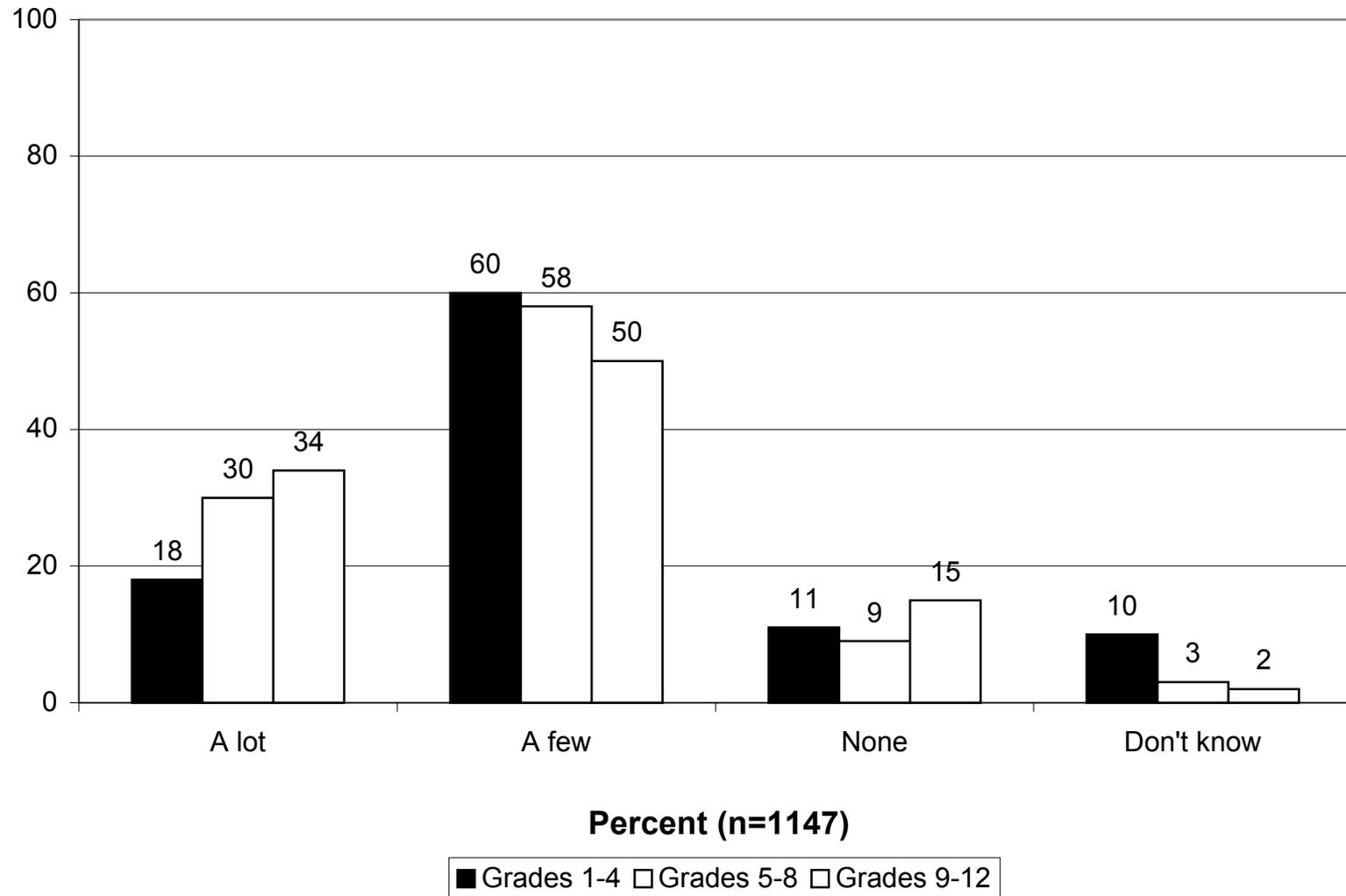
Q41. Considering everyone you could go fishing with, who would you most like to go fishing with? By Grade Cohort.



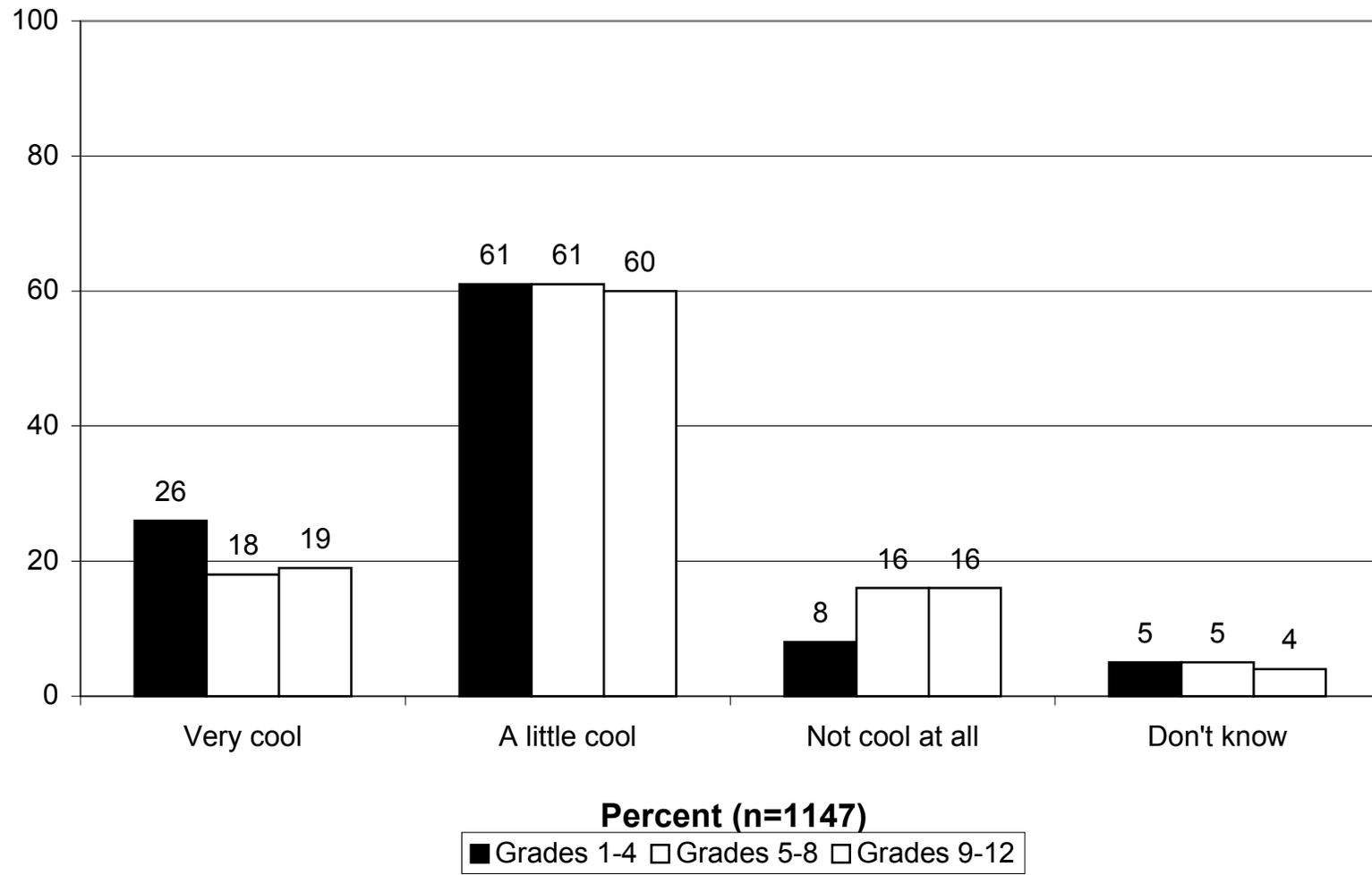
Q41. Cont'd. Considering everyone you could go fishing with, who would you most like to go fishing with? By Grade Cohort.



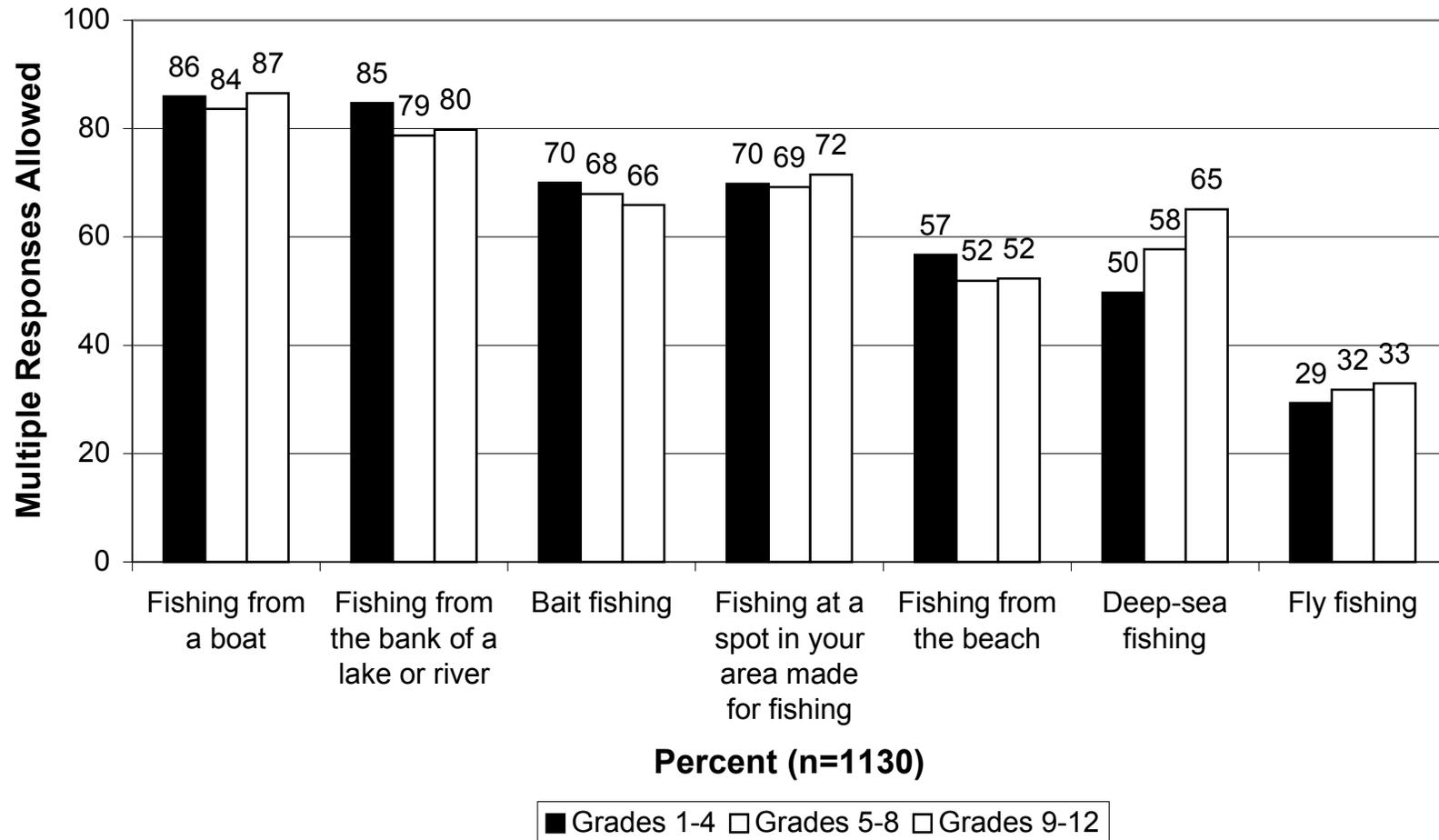
Q43. Would you say that a lot, a few, or none of your friends fish? By Grade Cohort.



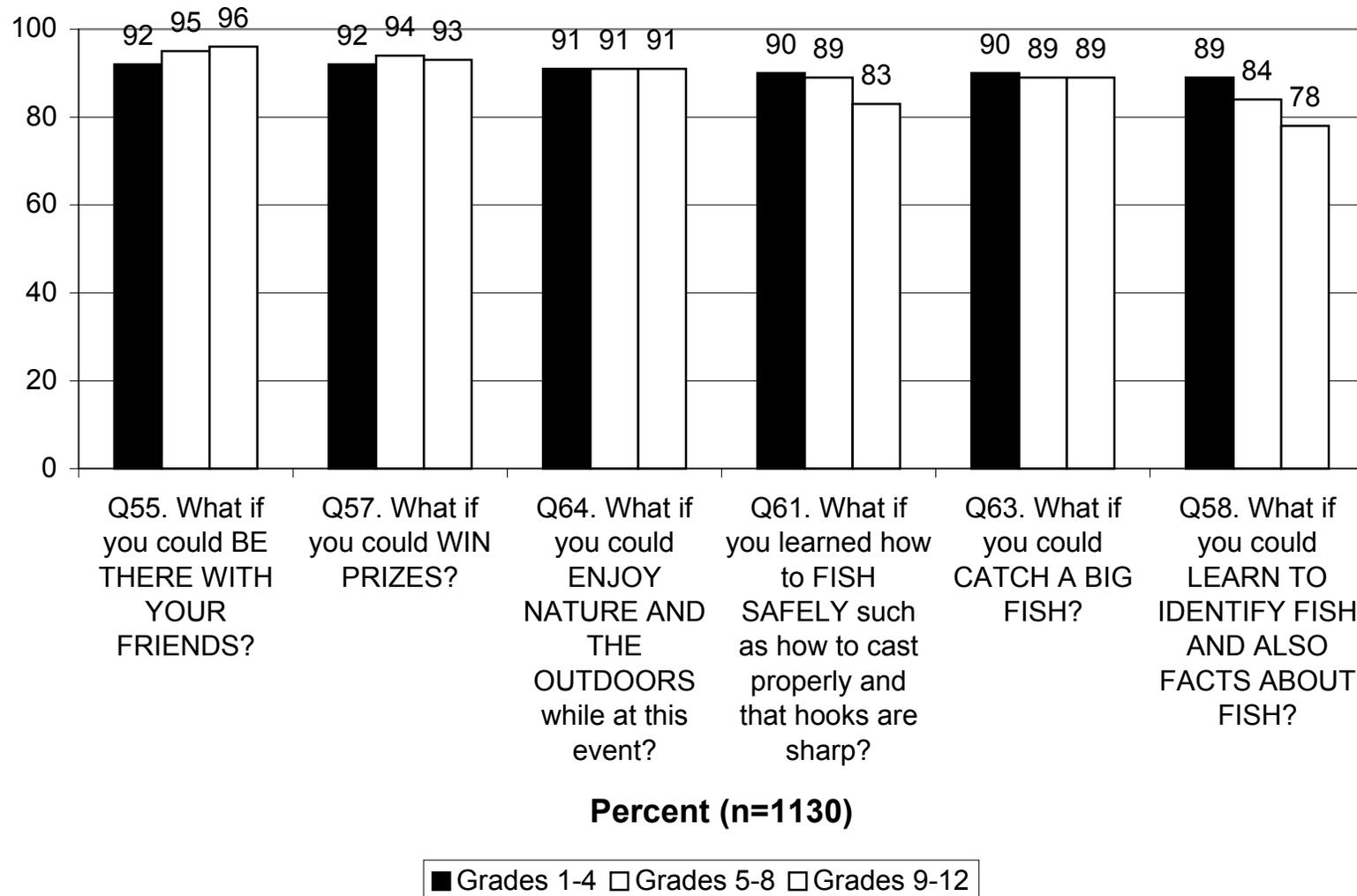
**Q44. How cool do you think kids your age think fishing is?
Is it very cool, a little cool, or not cool at all? By Grade
Cohort.**



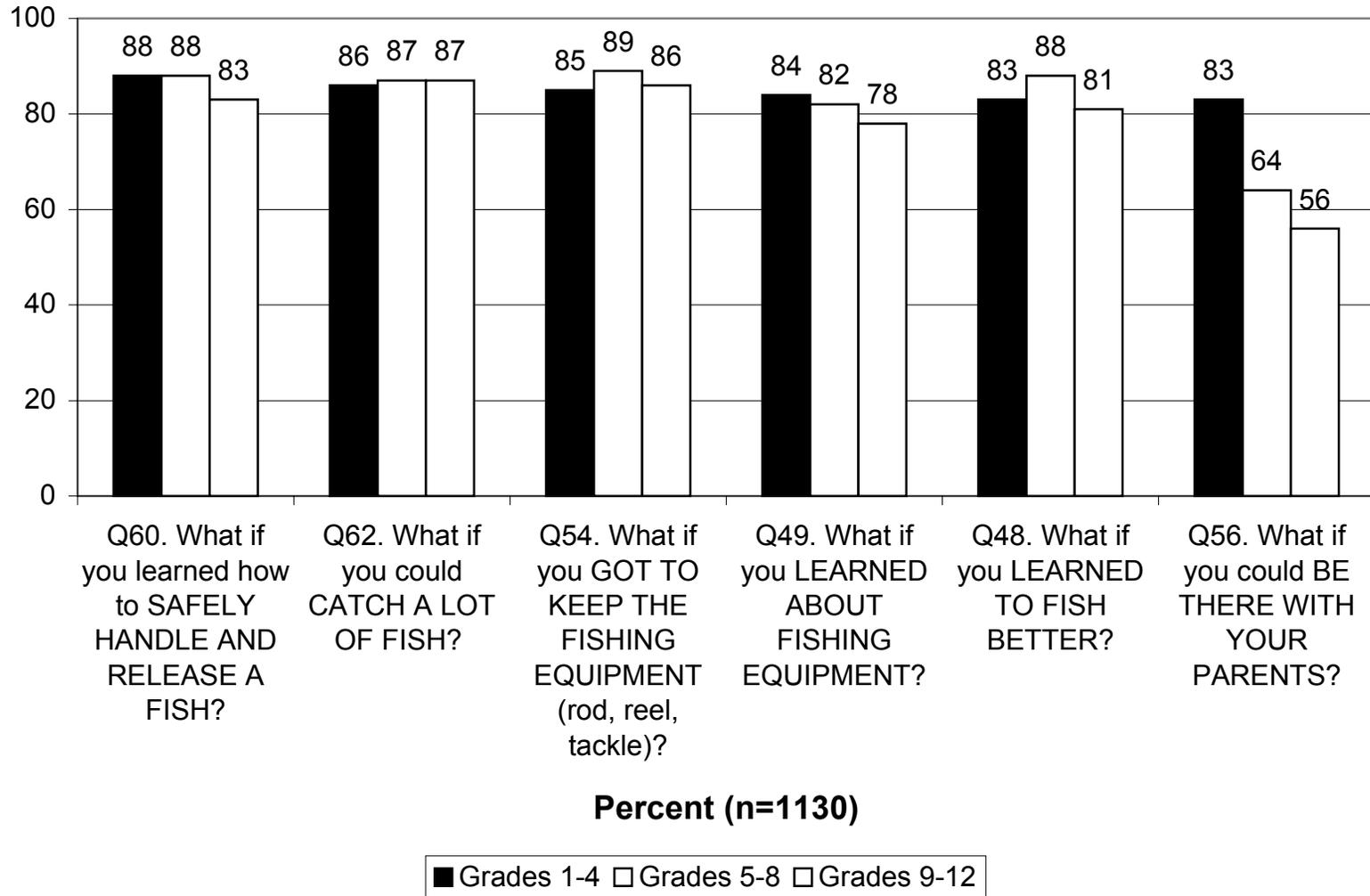
Q46. Now, I am going to read you a list of different types of fishing and I would like to know if you are interested in participating in any of these activities. Are you interested in...? By Grade Cohort.



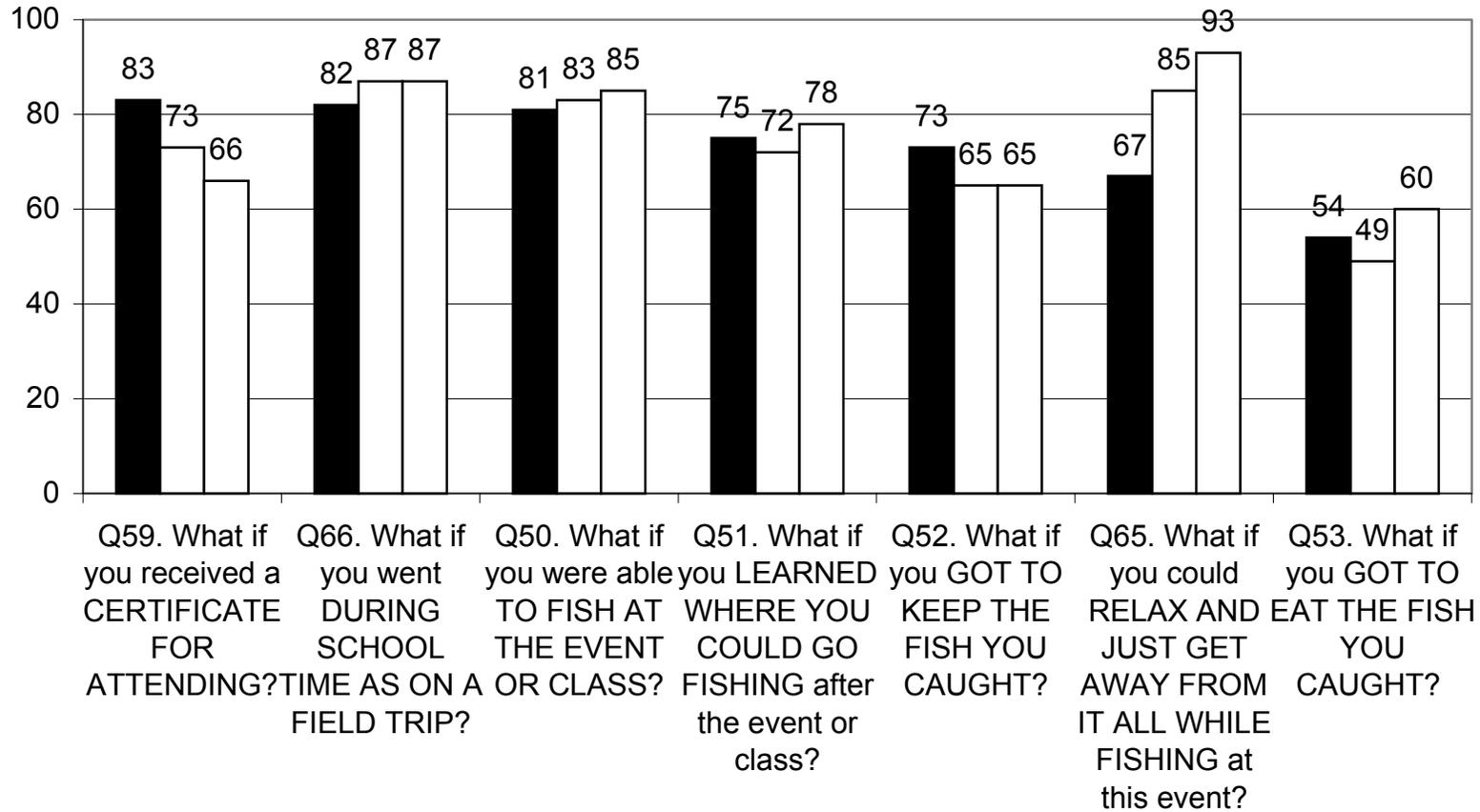
Q48-66. Would the following make the fishing event or class BETTER. By Grade Cohort.



Q48-66. Cont'd. Would the following make the fishing event or class BETTER. By Grade Cohort.



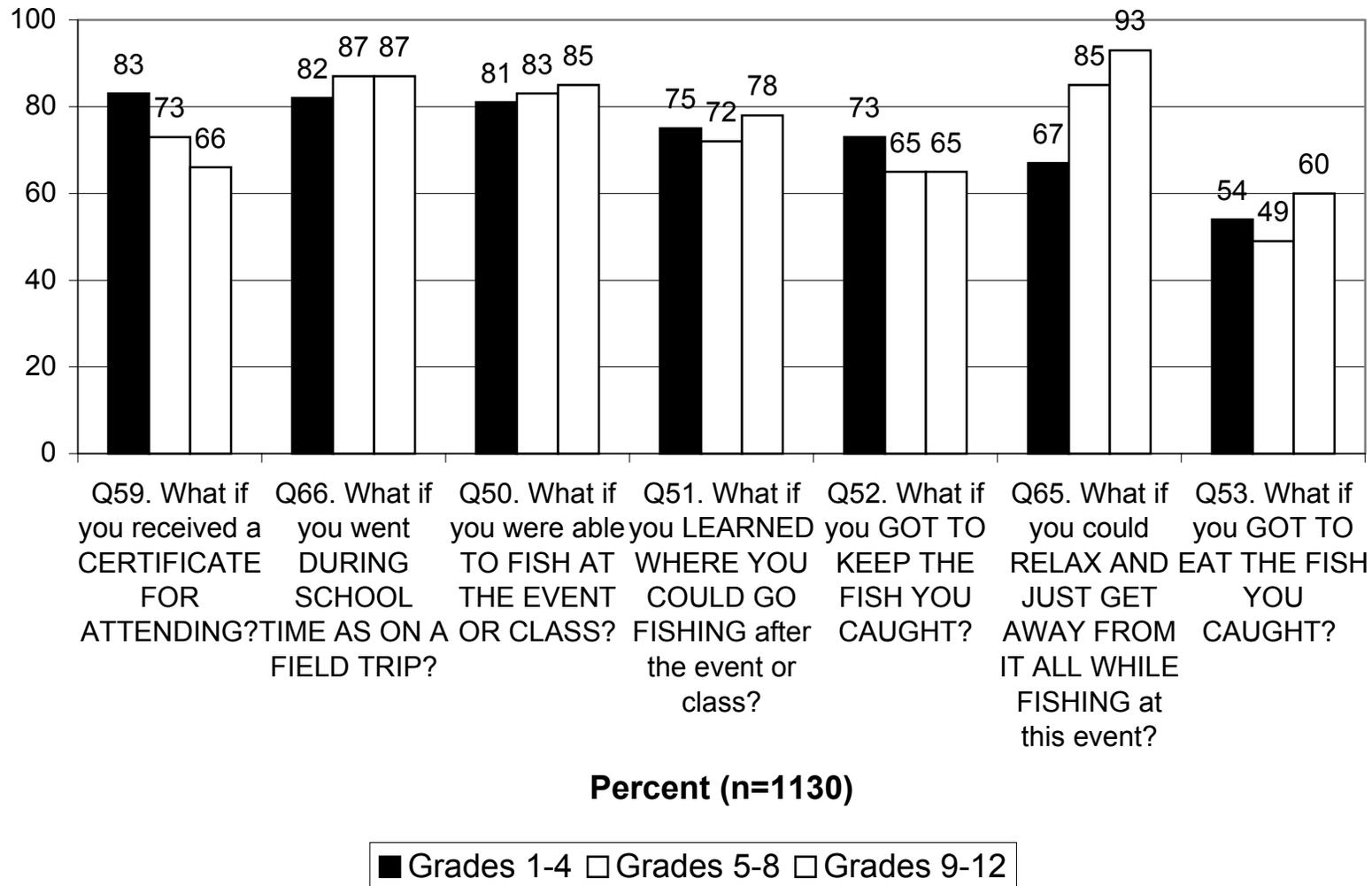
Q48-66. Cont'd. Would the following make the fishing event or class BETTER. By Grade Cohort.



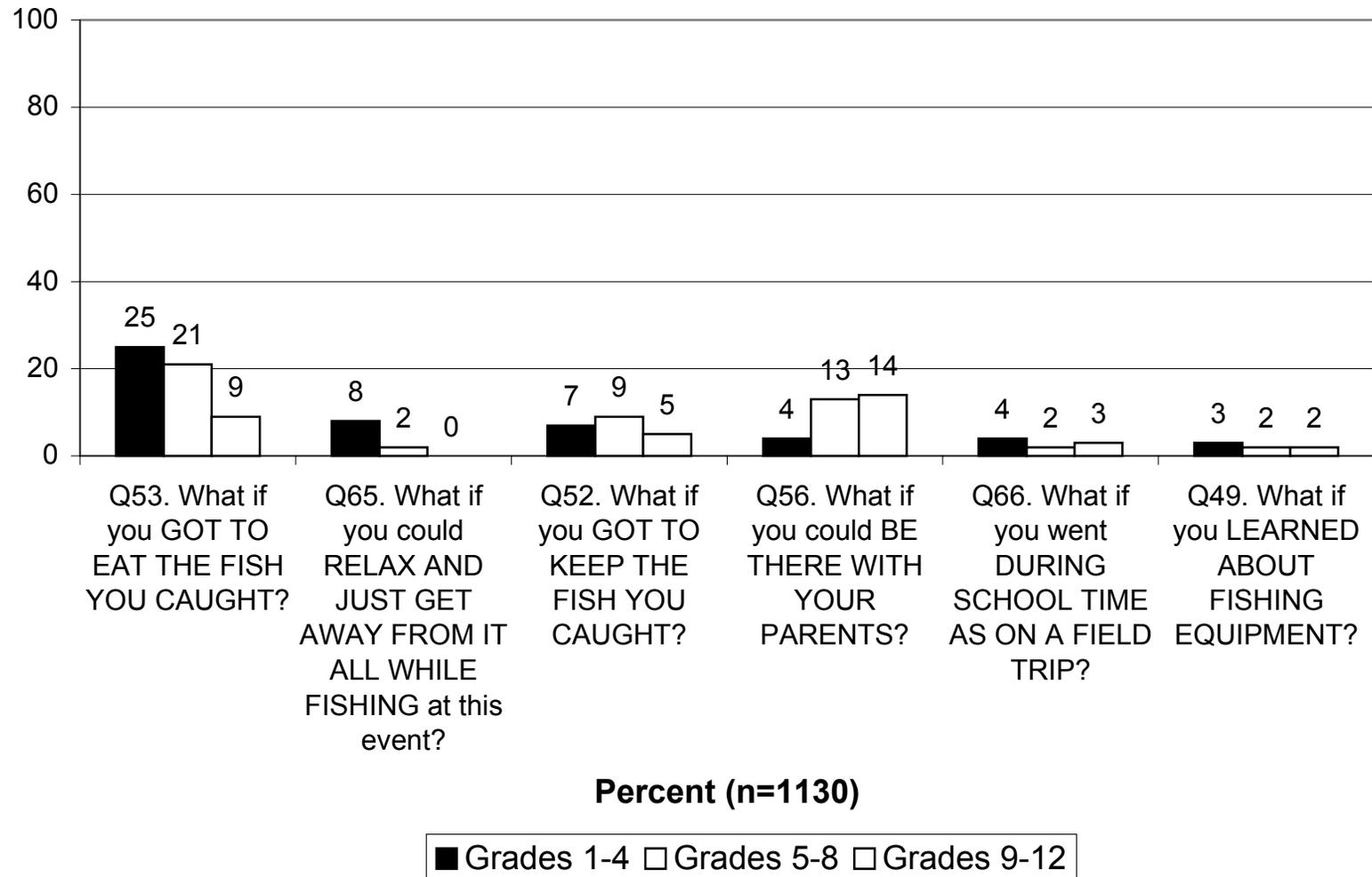
Percent (n=1130)

■ Grades 1-4 □ Grades 5-8 □ Grades 9-12

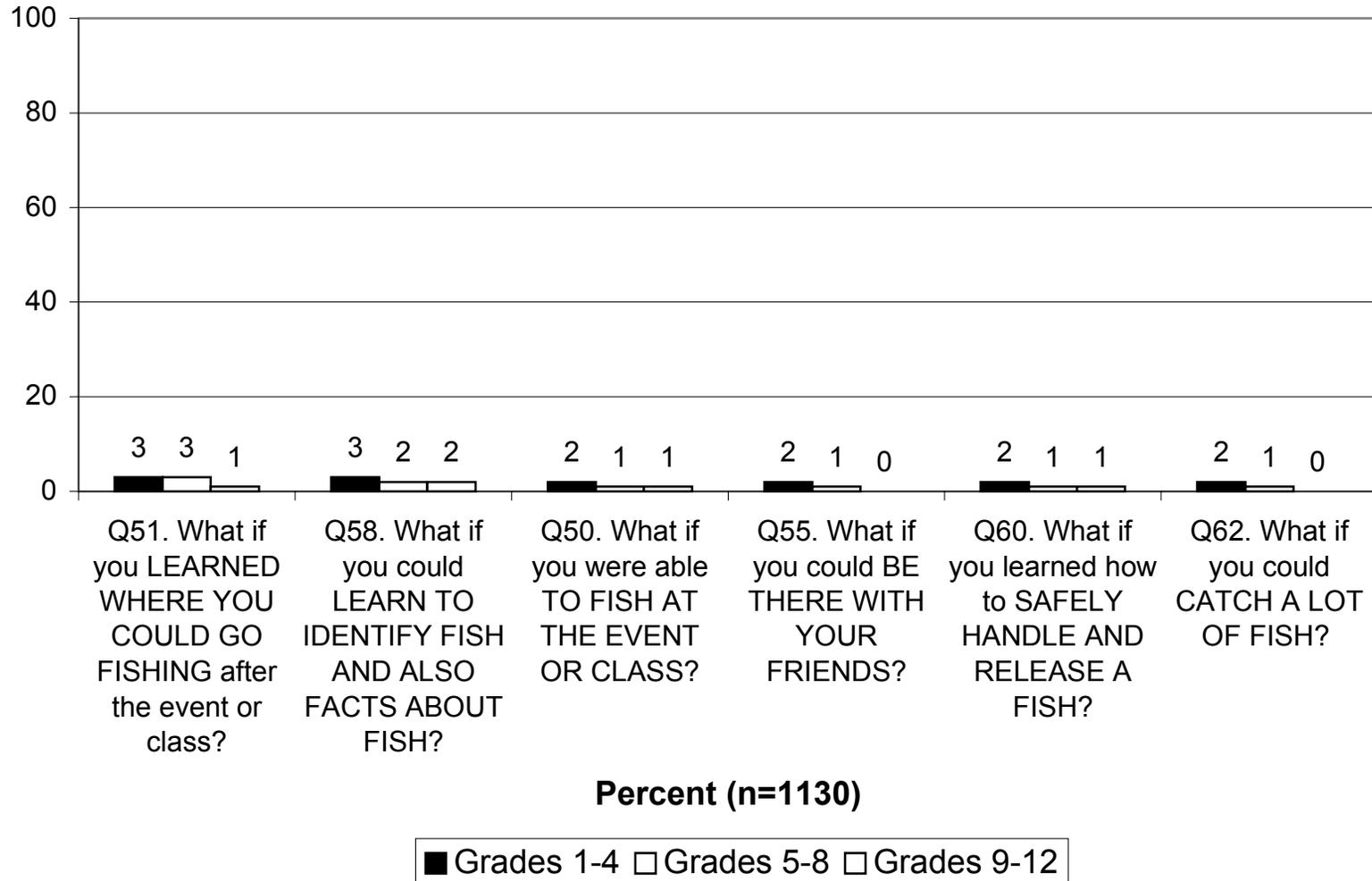
Q48-66. Cont'd. Would the following make the fishing event or class BETTER. By Grade Cohort.



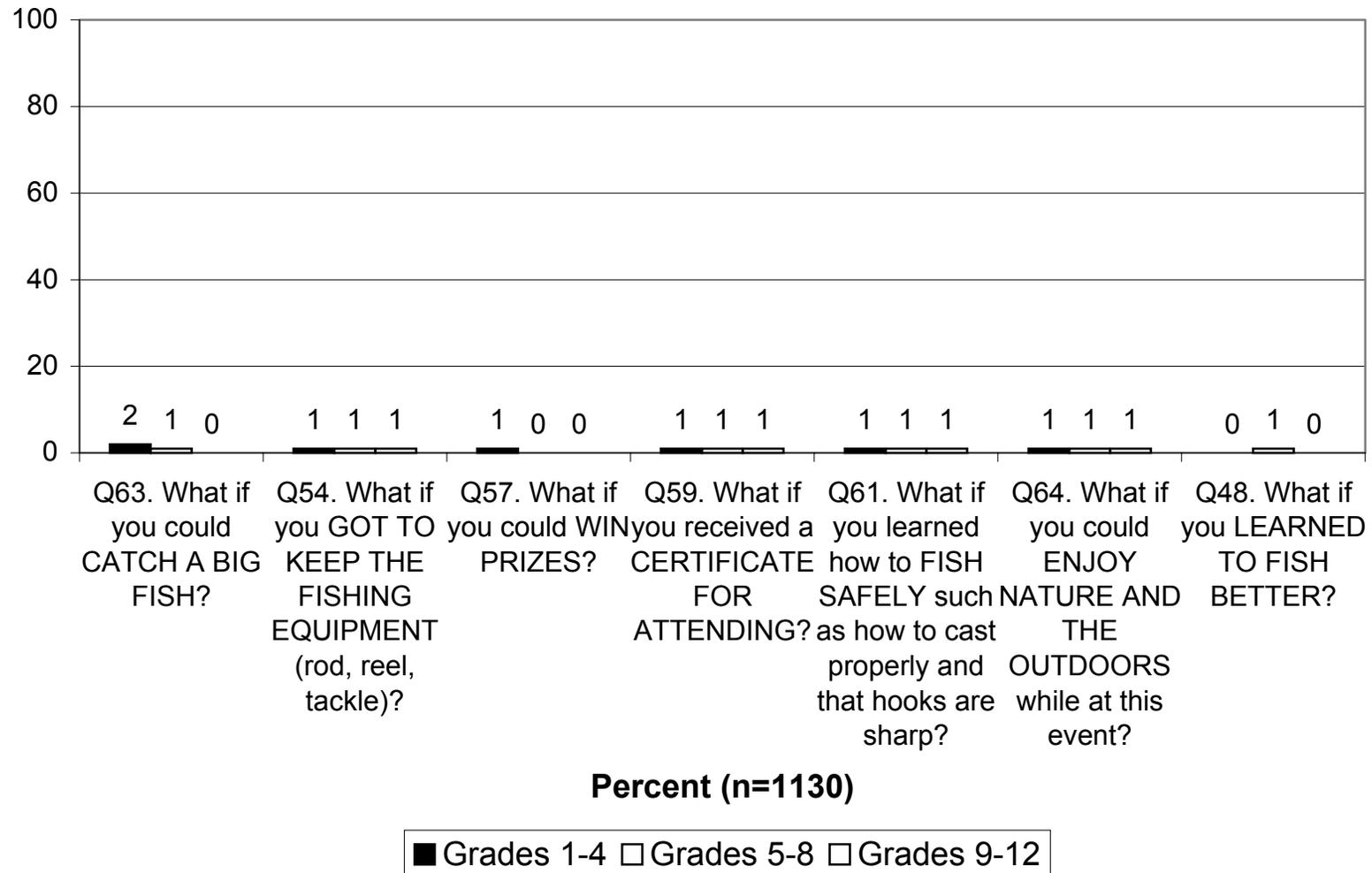
Q48-66. Would the following make the fishing event or class WORSE. By Grade Cohort.



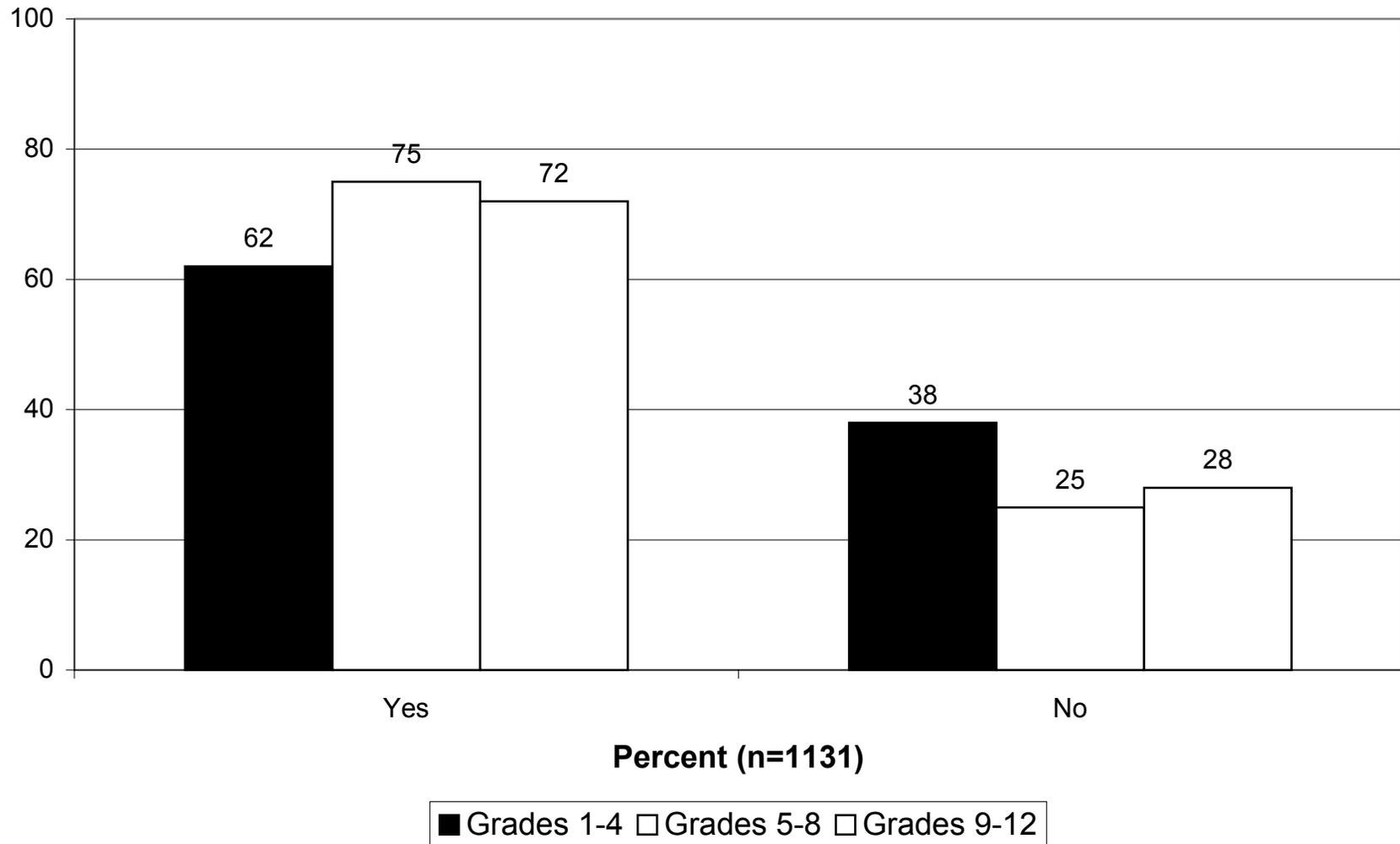
Q48-66. Cont'd. Would the following make the fishing event or class **WORSE**. By Grade Cohort.



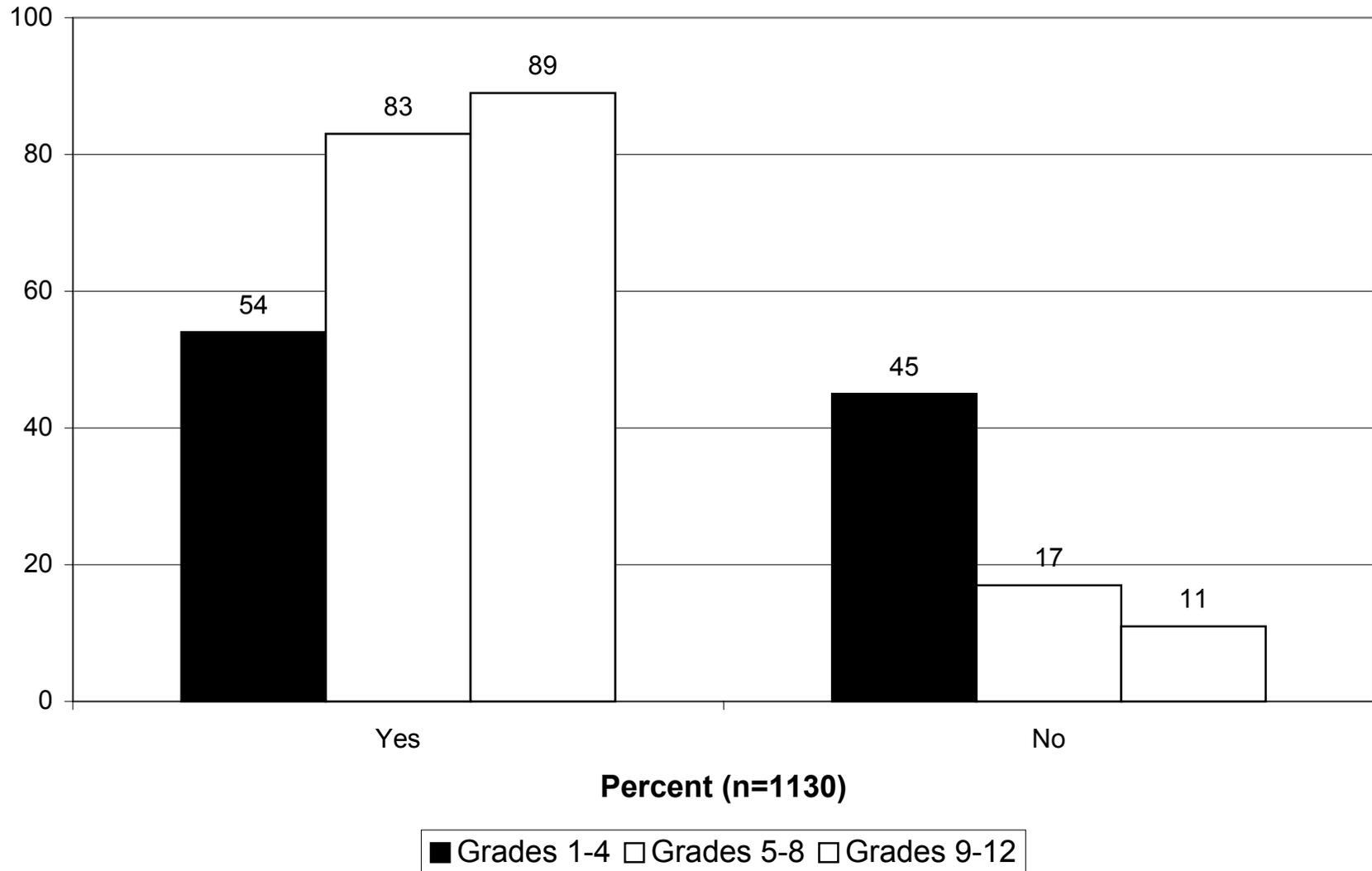
Q48-66. Cont'd. Would the following make the fishing event or class WORSE. By Grade Cohort.



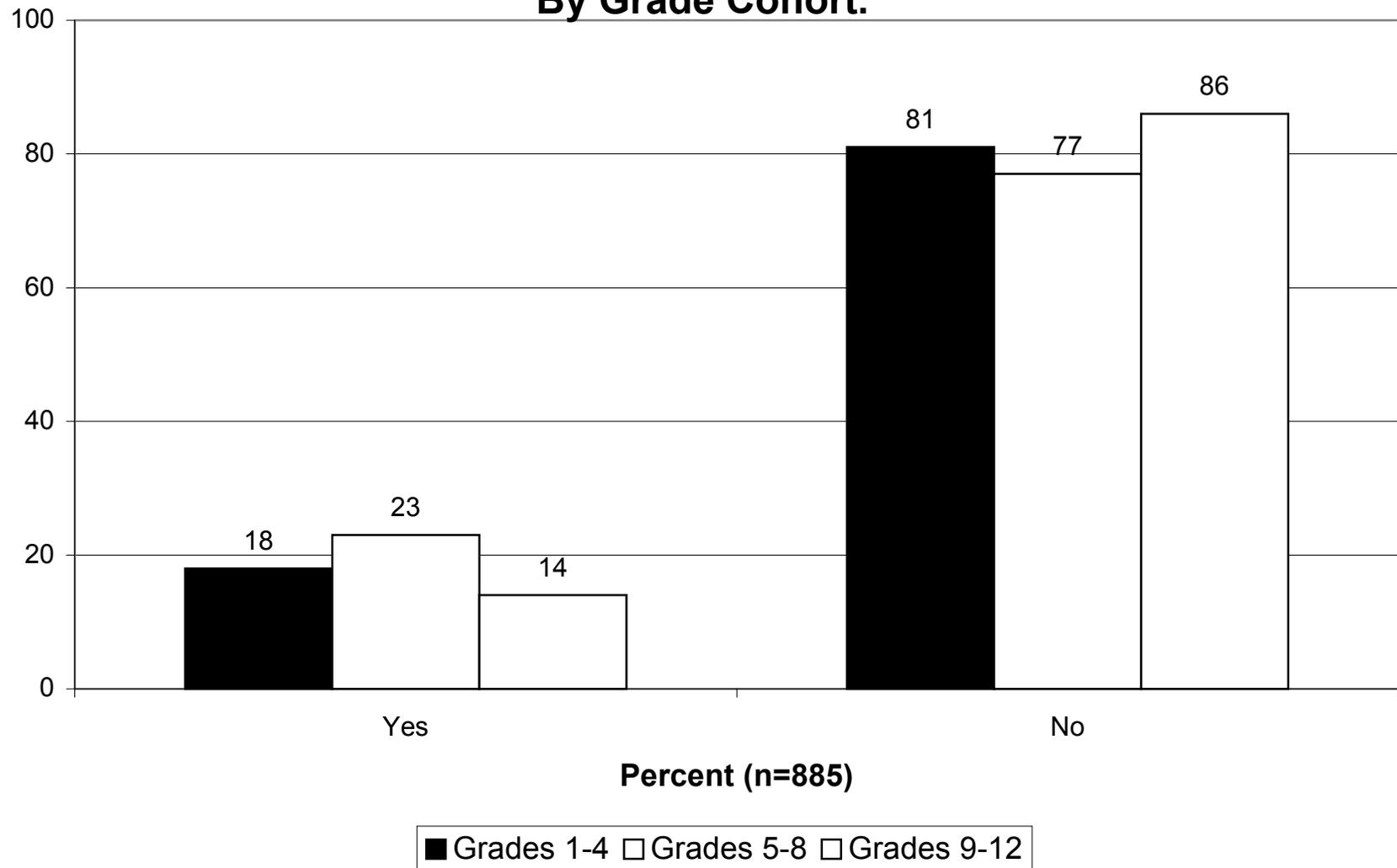
Q67. Have you ever played a computer fishing game or hand held fishing game? By Grade Cohort.



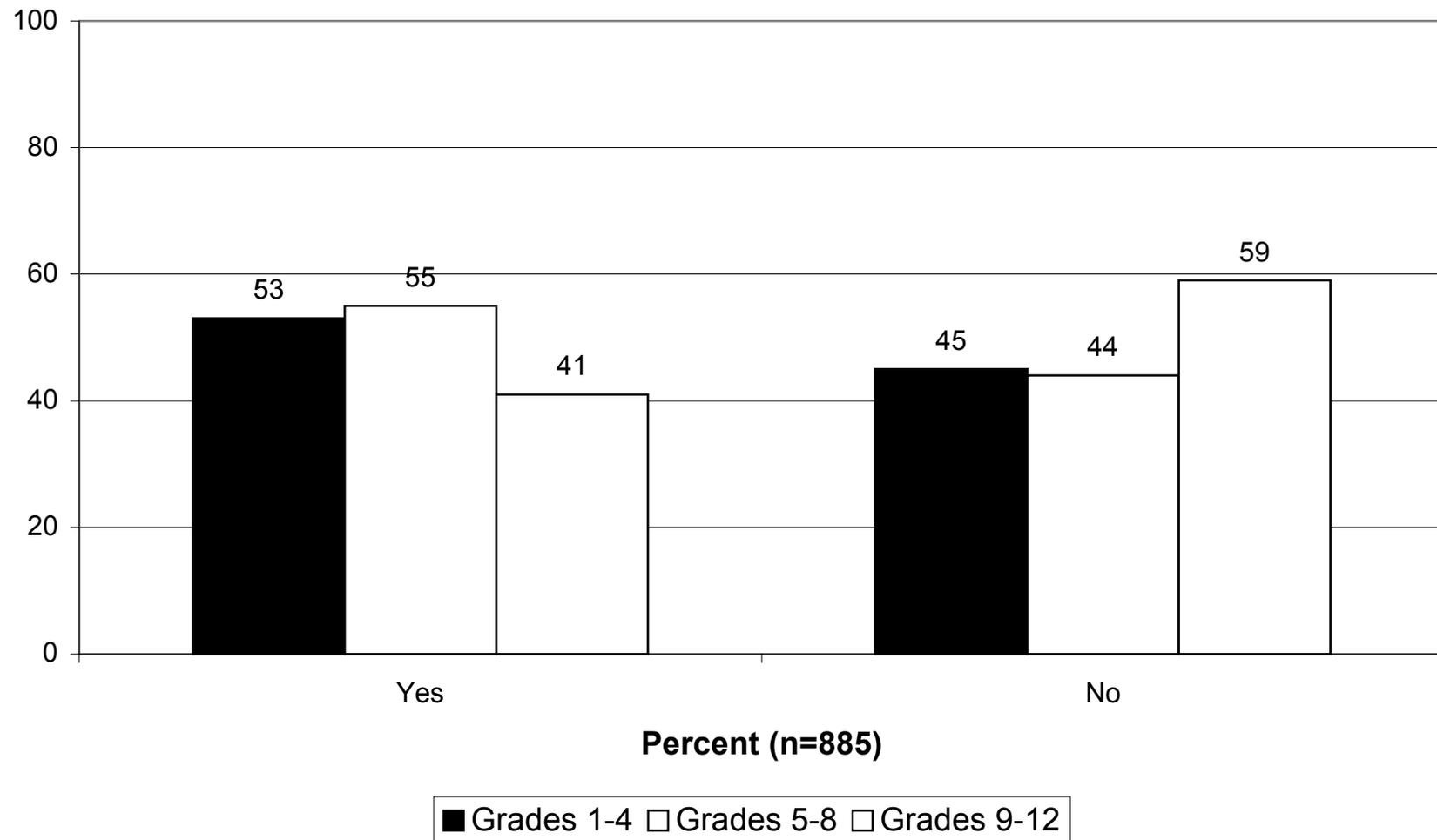
Q68. Do you use the internet? By Grade Cohort.



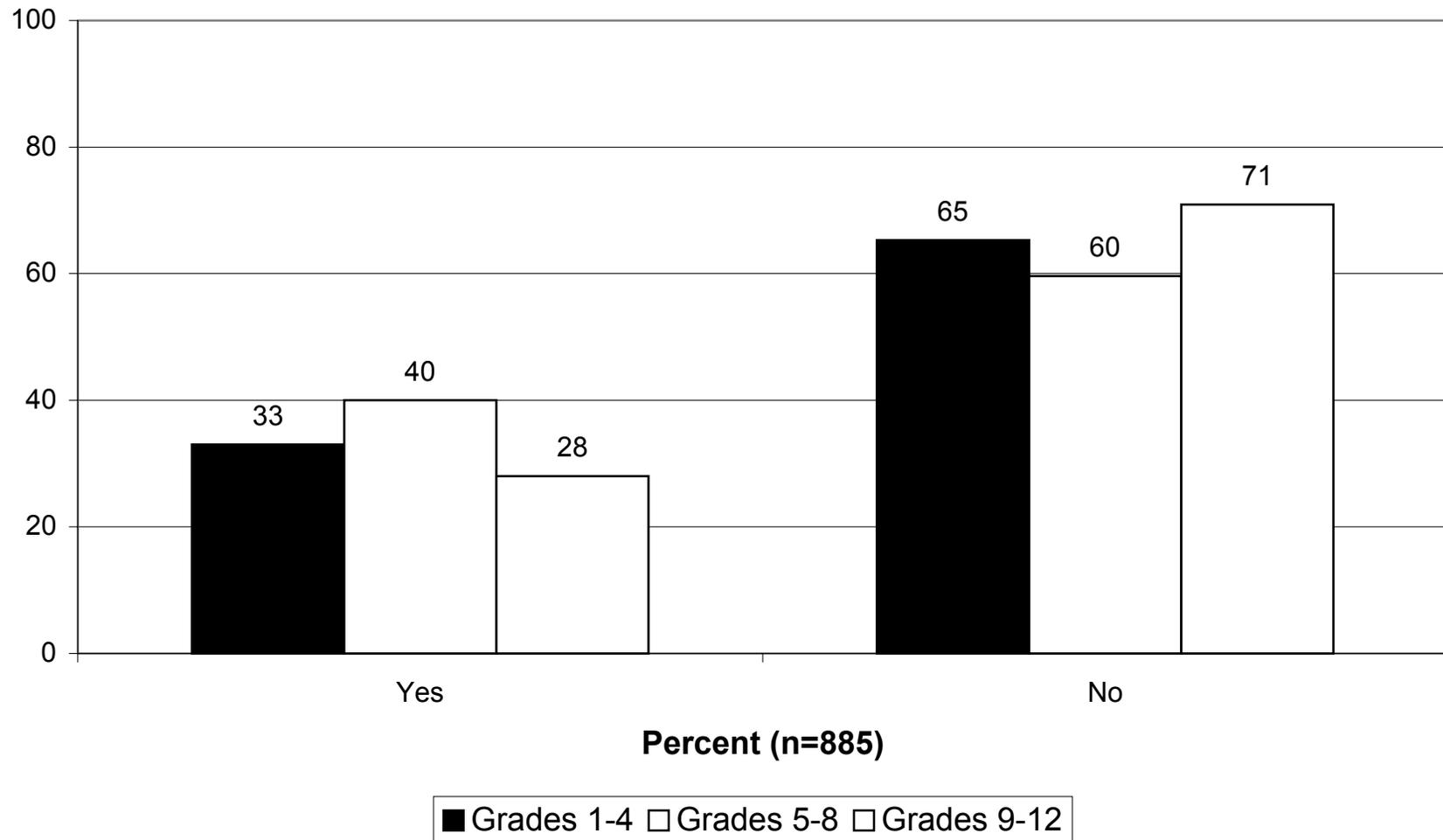
**Q69. Do you use the internet to find information about fishing? (asked of those who used the internet).
By Grade Cohort.**



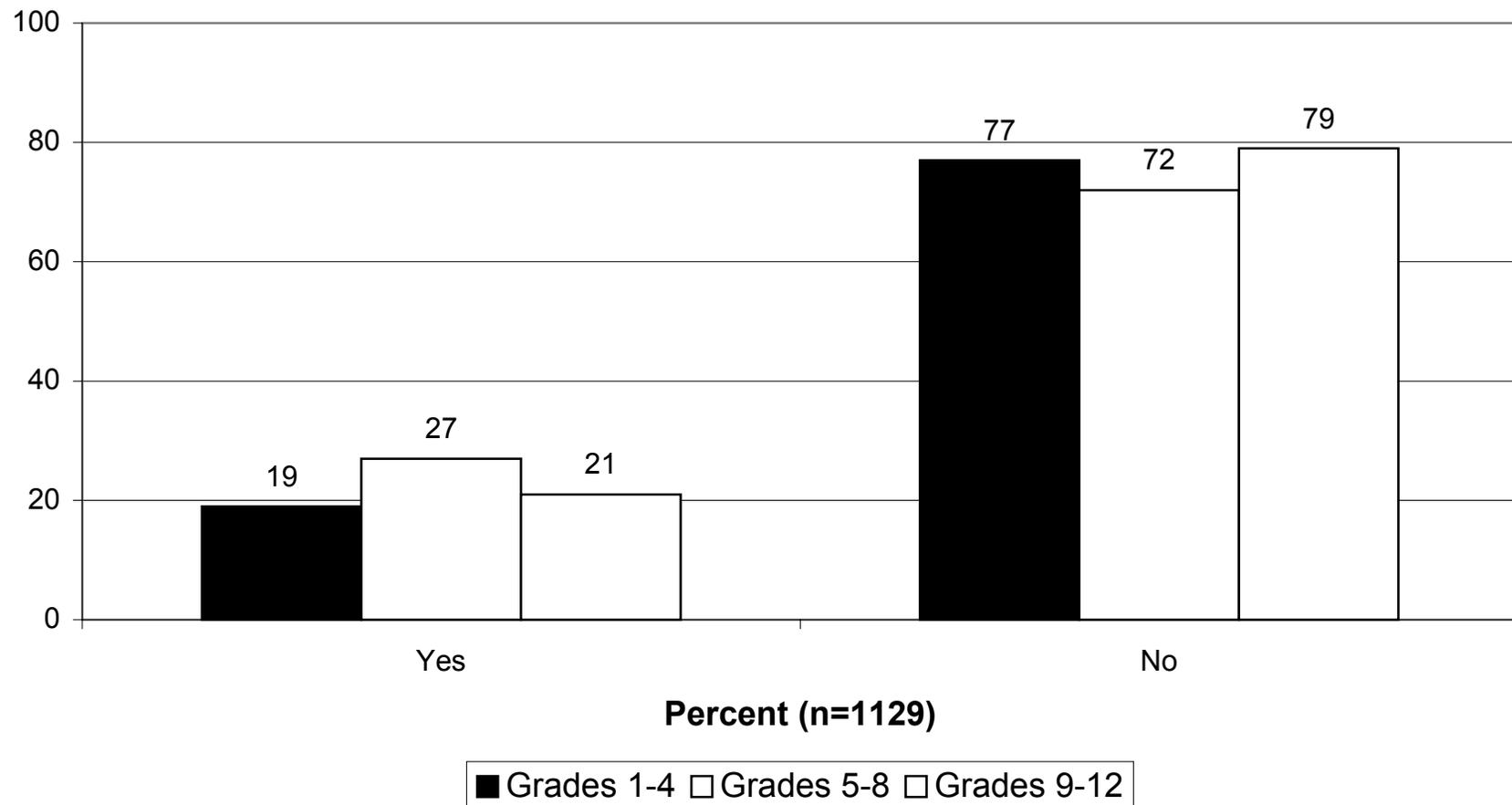
**Q70. Do you use the internet to find information about aquatic animals? (asked of those who used the internet).
By Grade Cohort.**



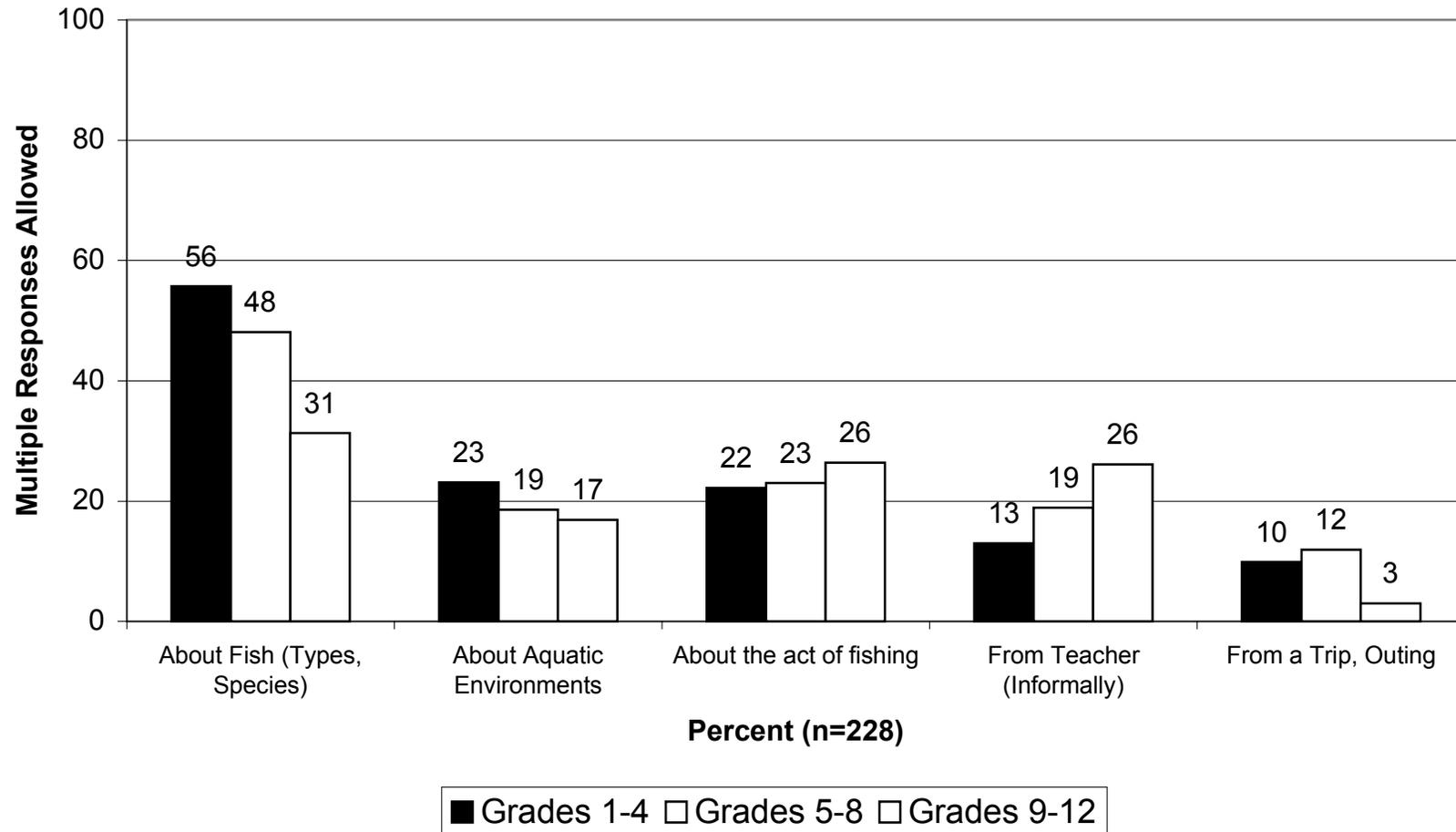
**Q71. Do you use the internet to find information about aquatic habitats? (asked of those who used the internet).
By Grade Cohort.**



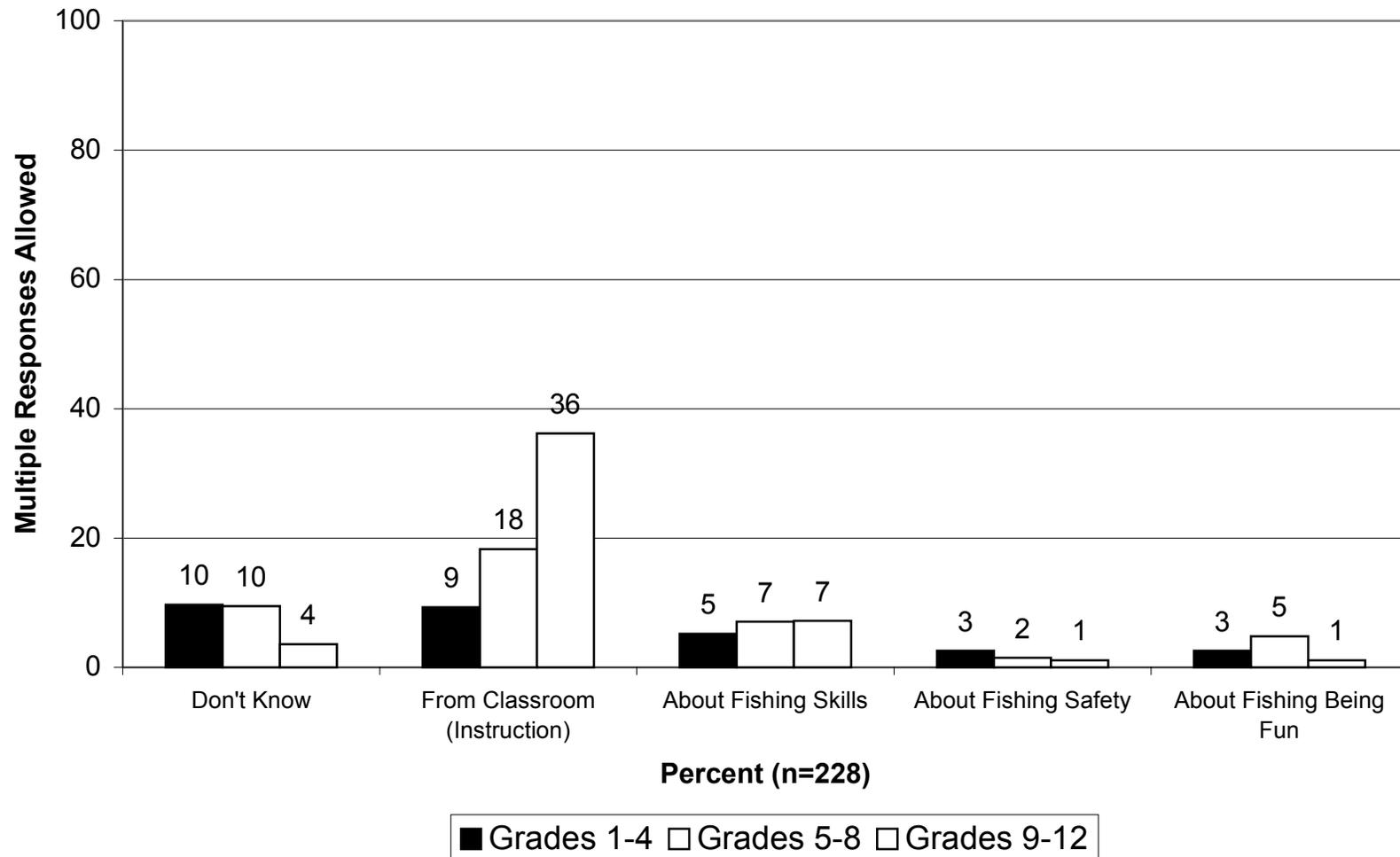
Q72. Within the past 12 months, have you seen or heard any information from teachers or other adults IN YOUR SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? By Grade Cohort.



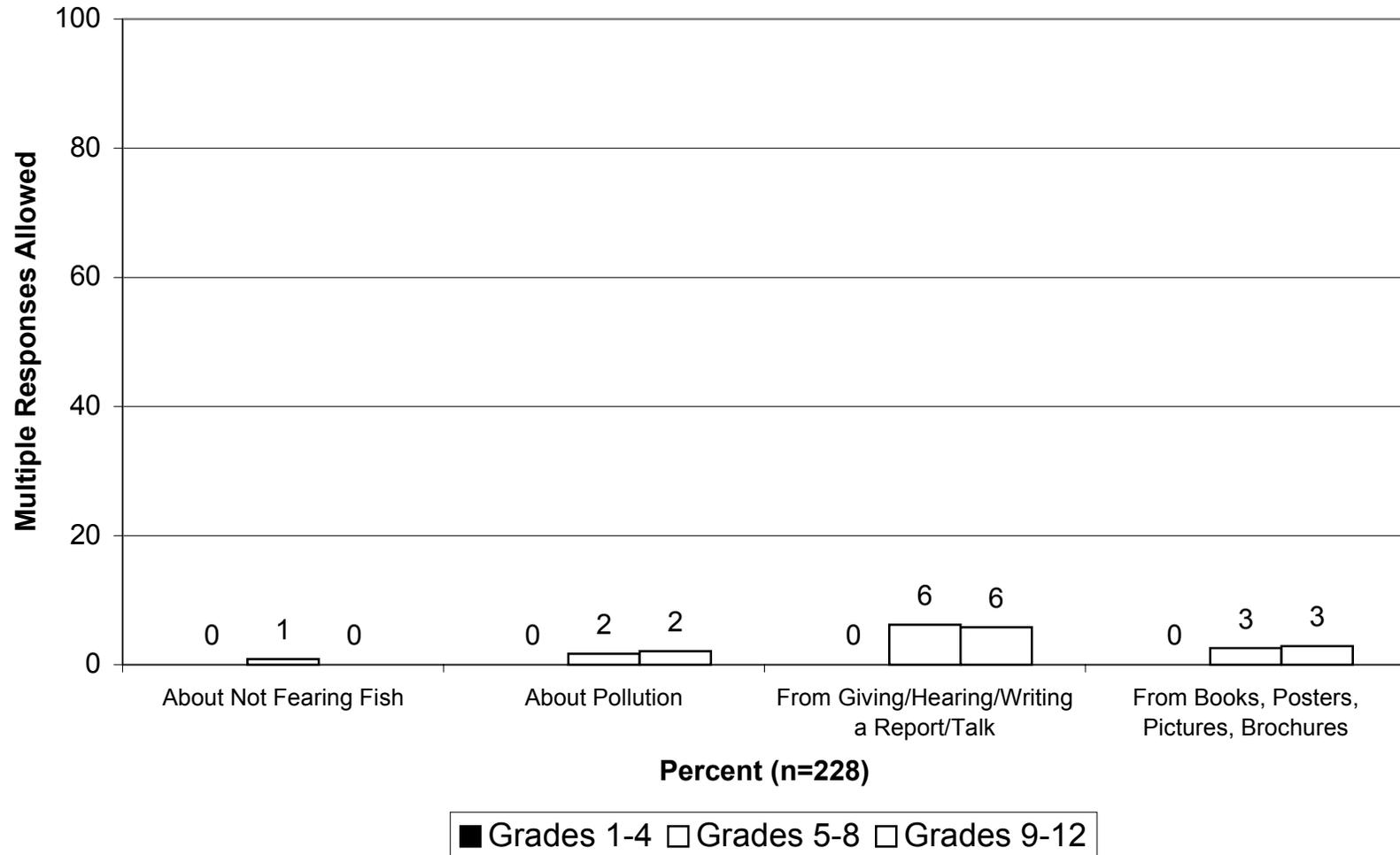
Q73. What did you see or hear IN SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? By Grade.



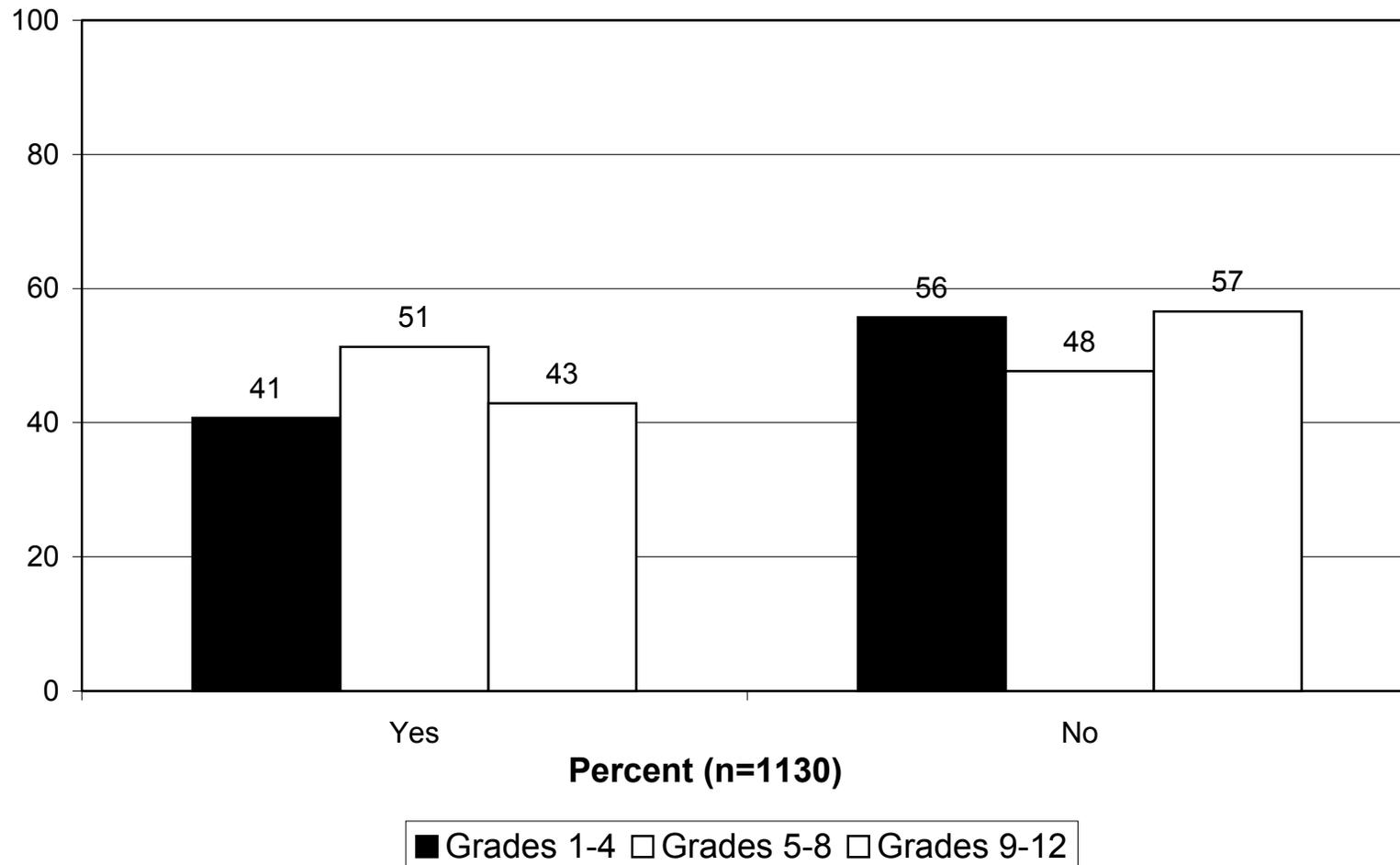
Q73. Cont'd. What did you see or hear IN SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? By Grade.



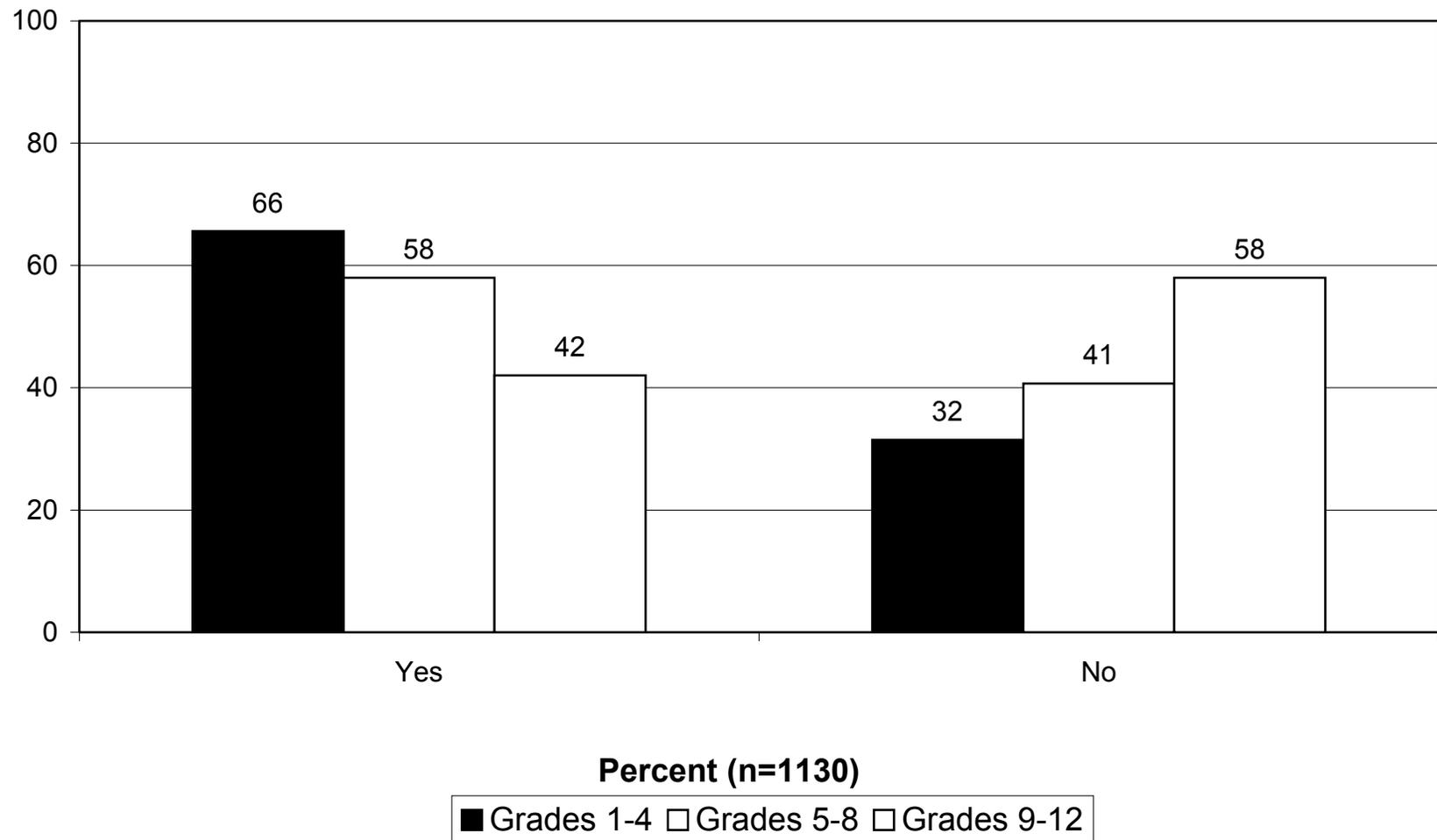
Q73. Cont'd. What did you see or hear IN SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? By Grade.



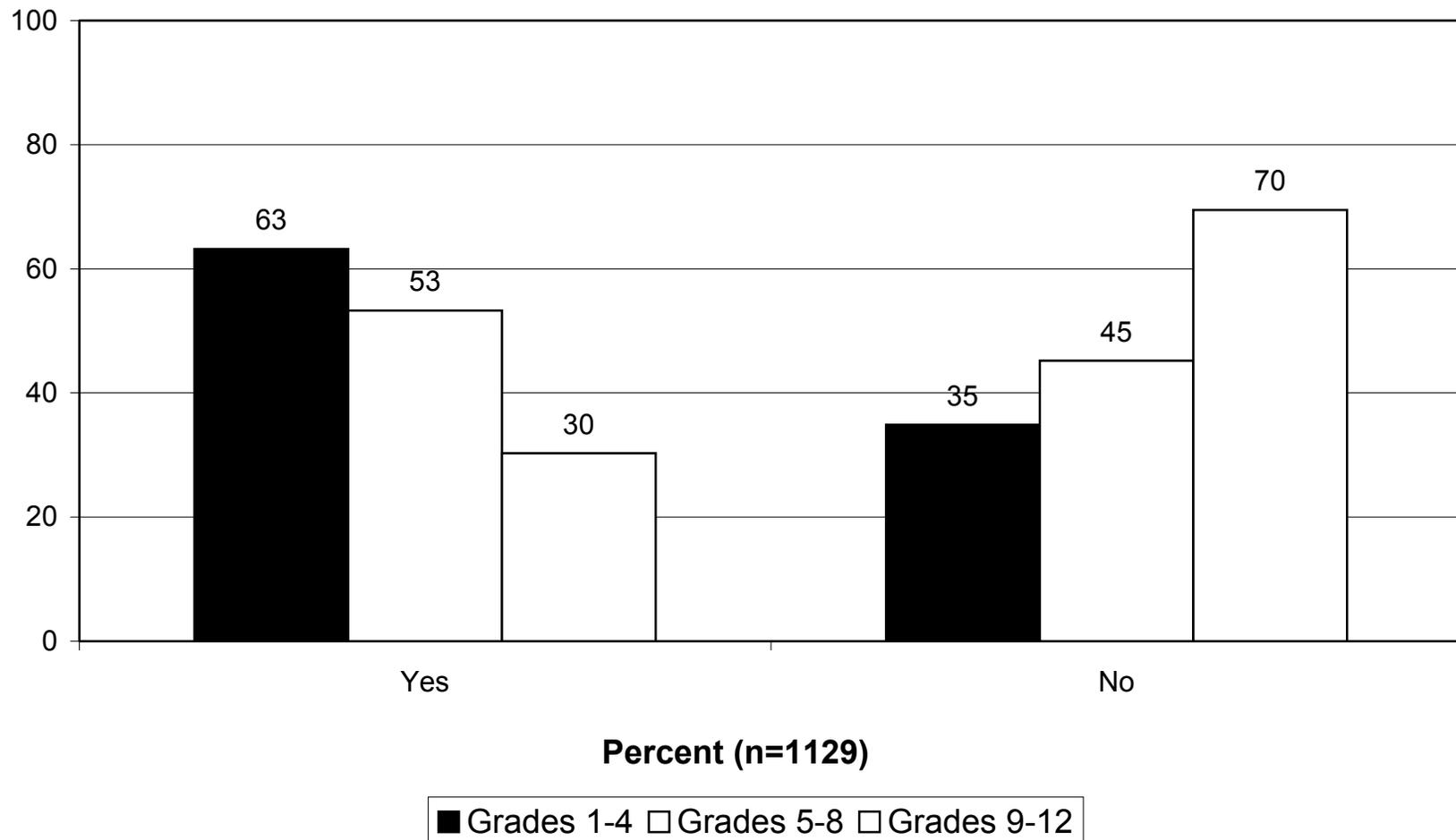
Q74. Within the past 12 months, have you seen or heard any information OUTSIDE OF SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? By Grade Cohort.



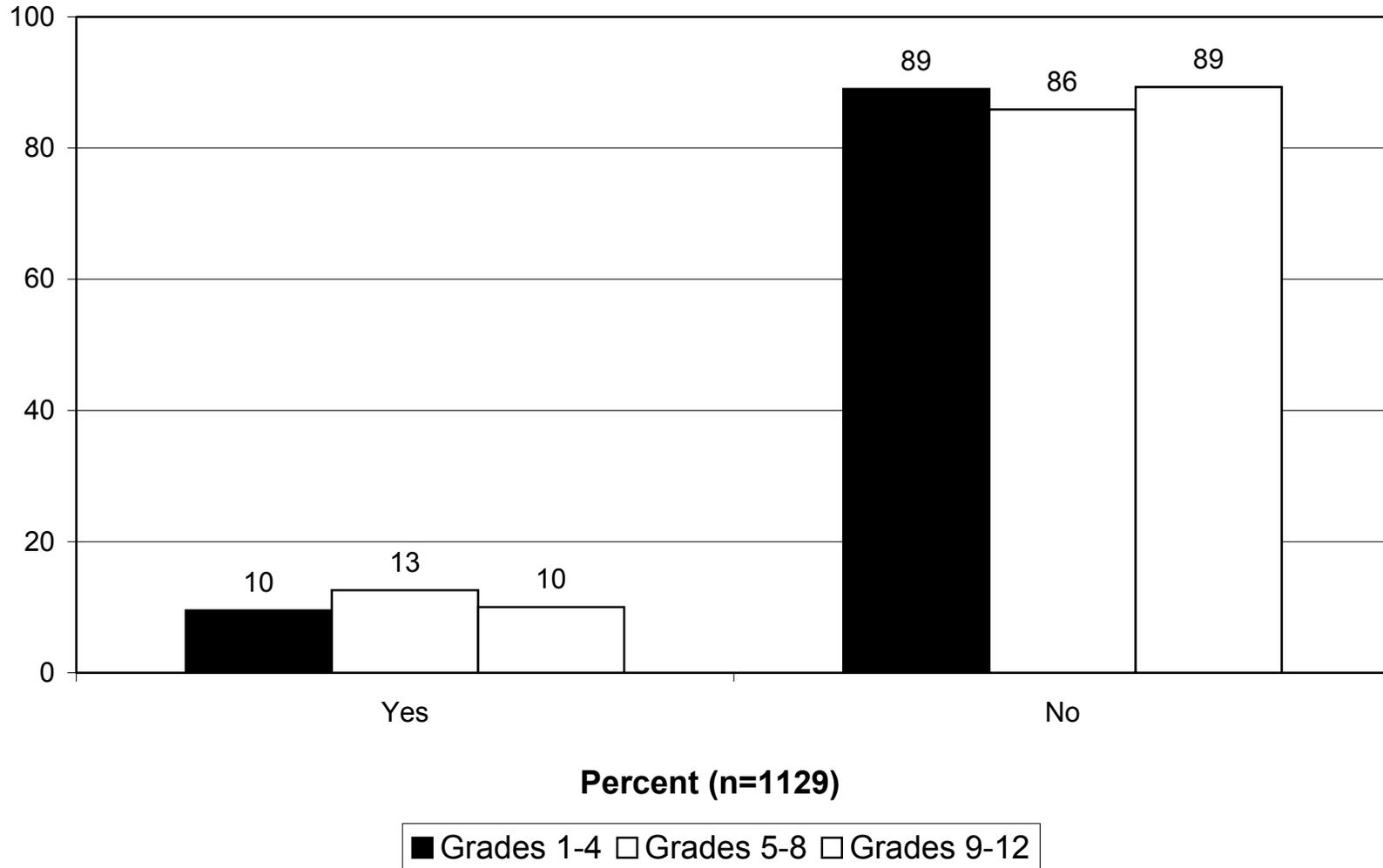
Q76. Within the past 12 months, did your school class do anything to help you learn about the oceans and the animals and plants that live there? By Grade Cohort.



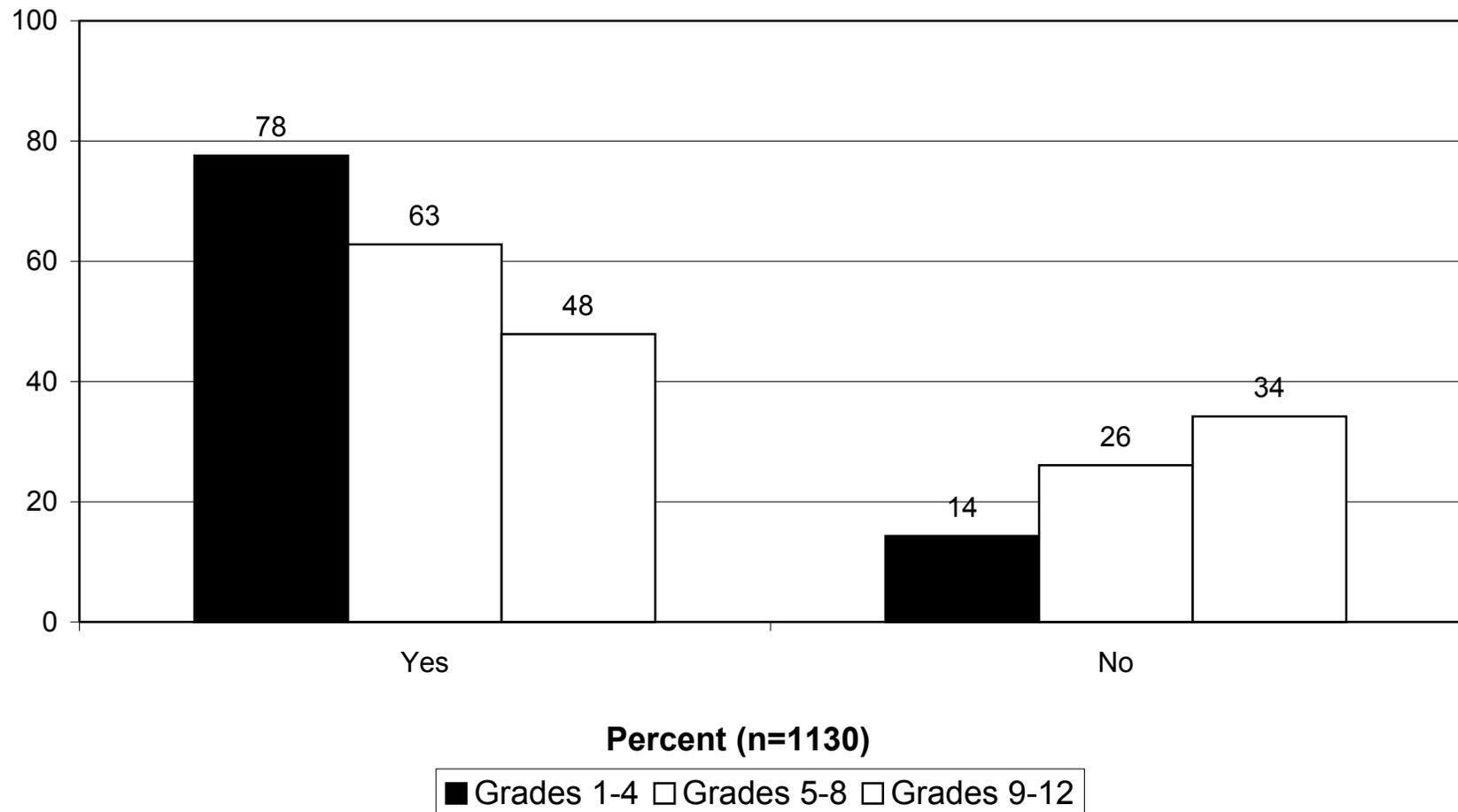
Q77. Within the past 12 months, did your school class do anything to help you learn about South Carolina rivers, ponds, lakes or streams and the animals and plants that live there? By Grade Cohort.



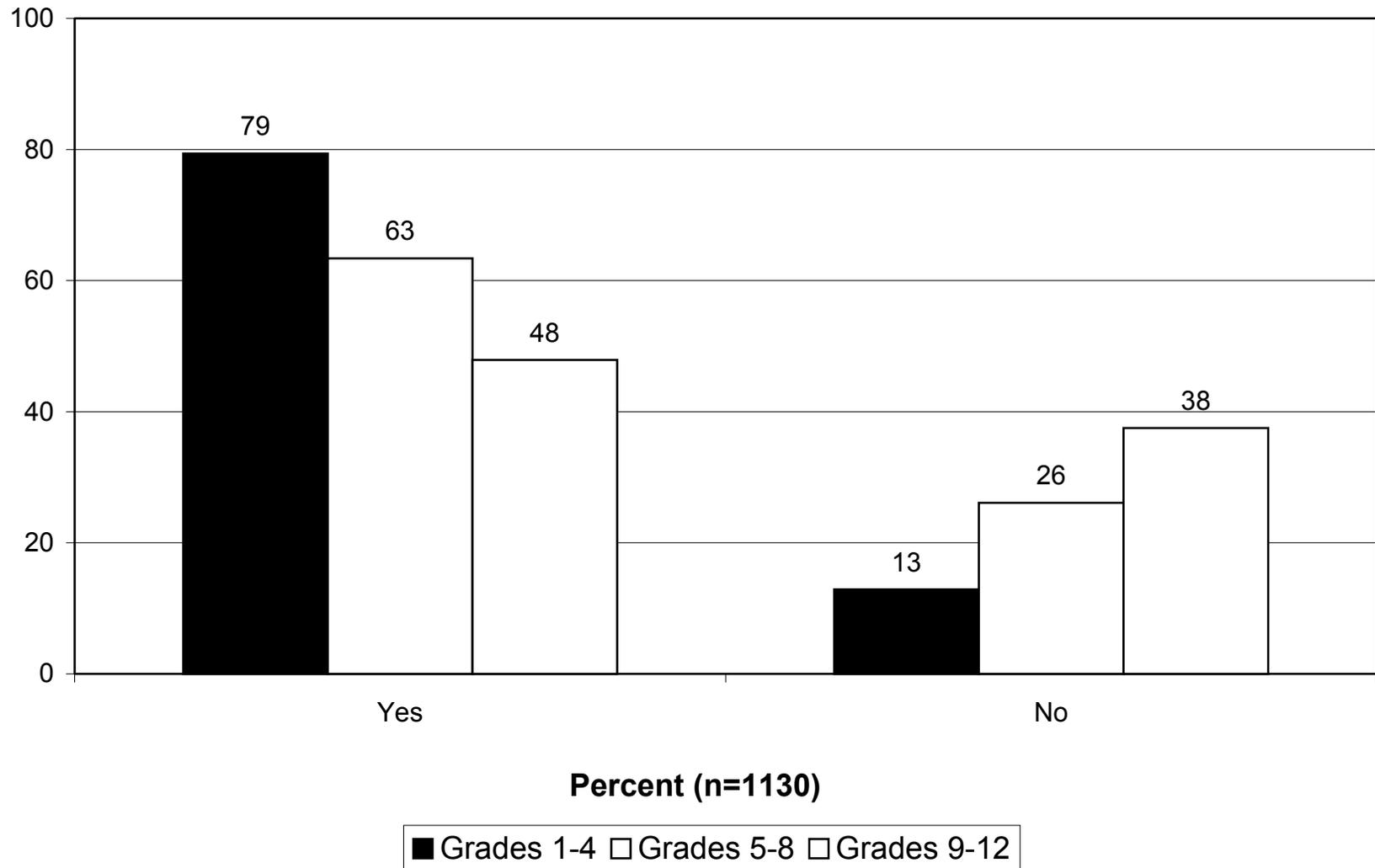
Q78. Do you belong to an animal or outdoor club? By Grade Cohort.



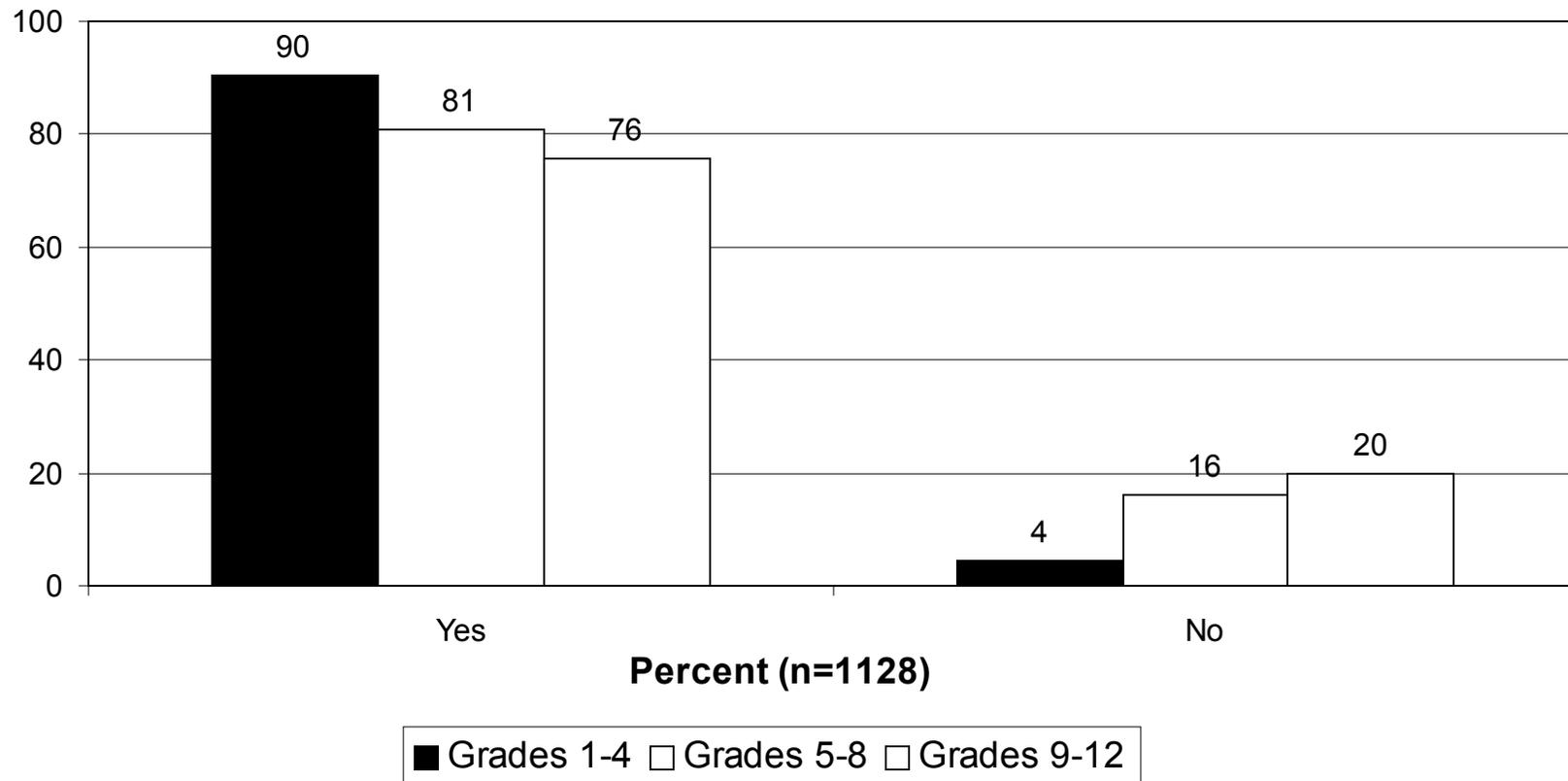
**Q79. Would you join a club that helped you learn more about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live there?
By Grade Cohort.**



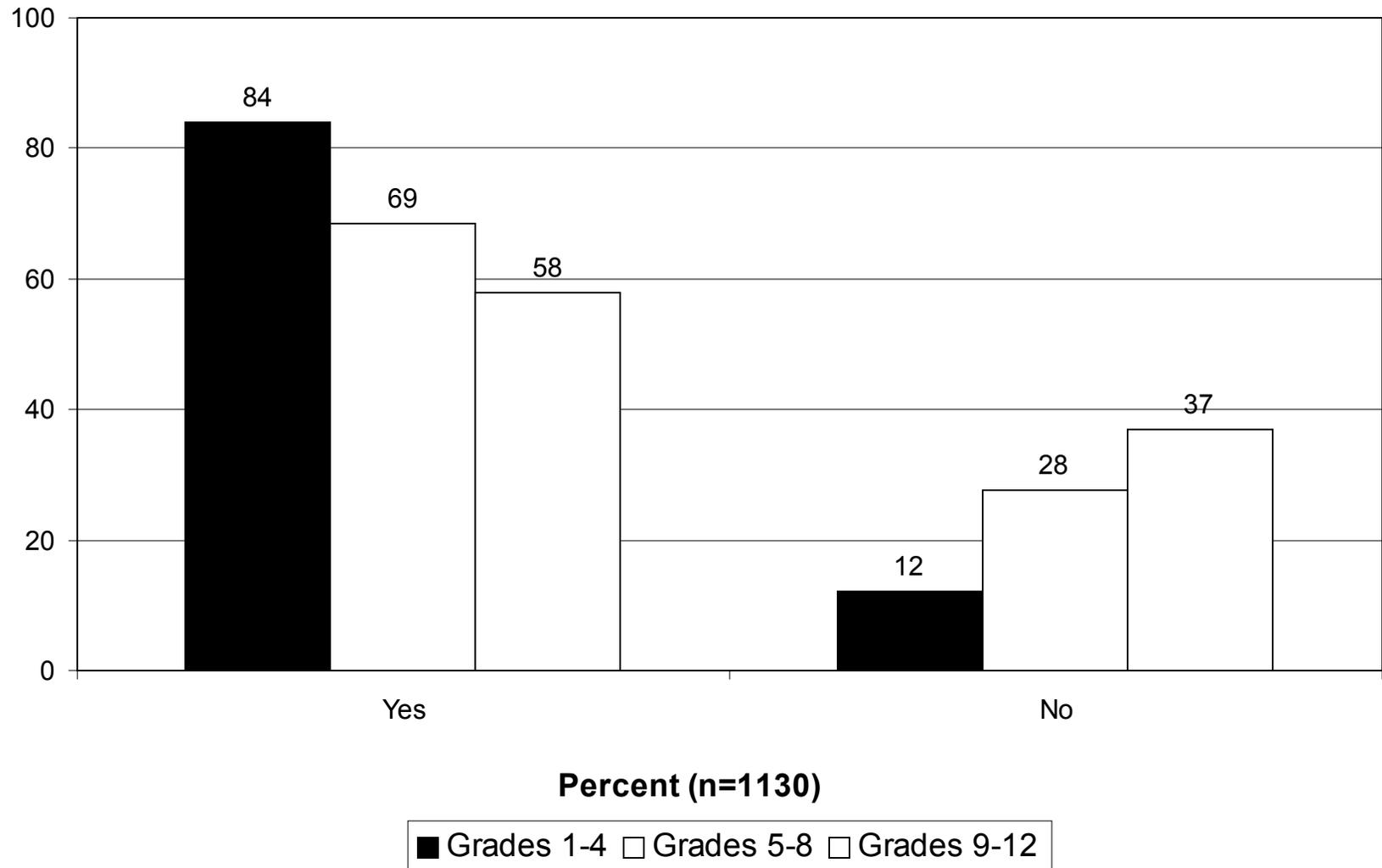
Q80. Would you join a club that helped you learn more about fishing? By Grade Cohort.



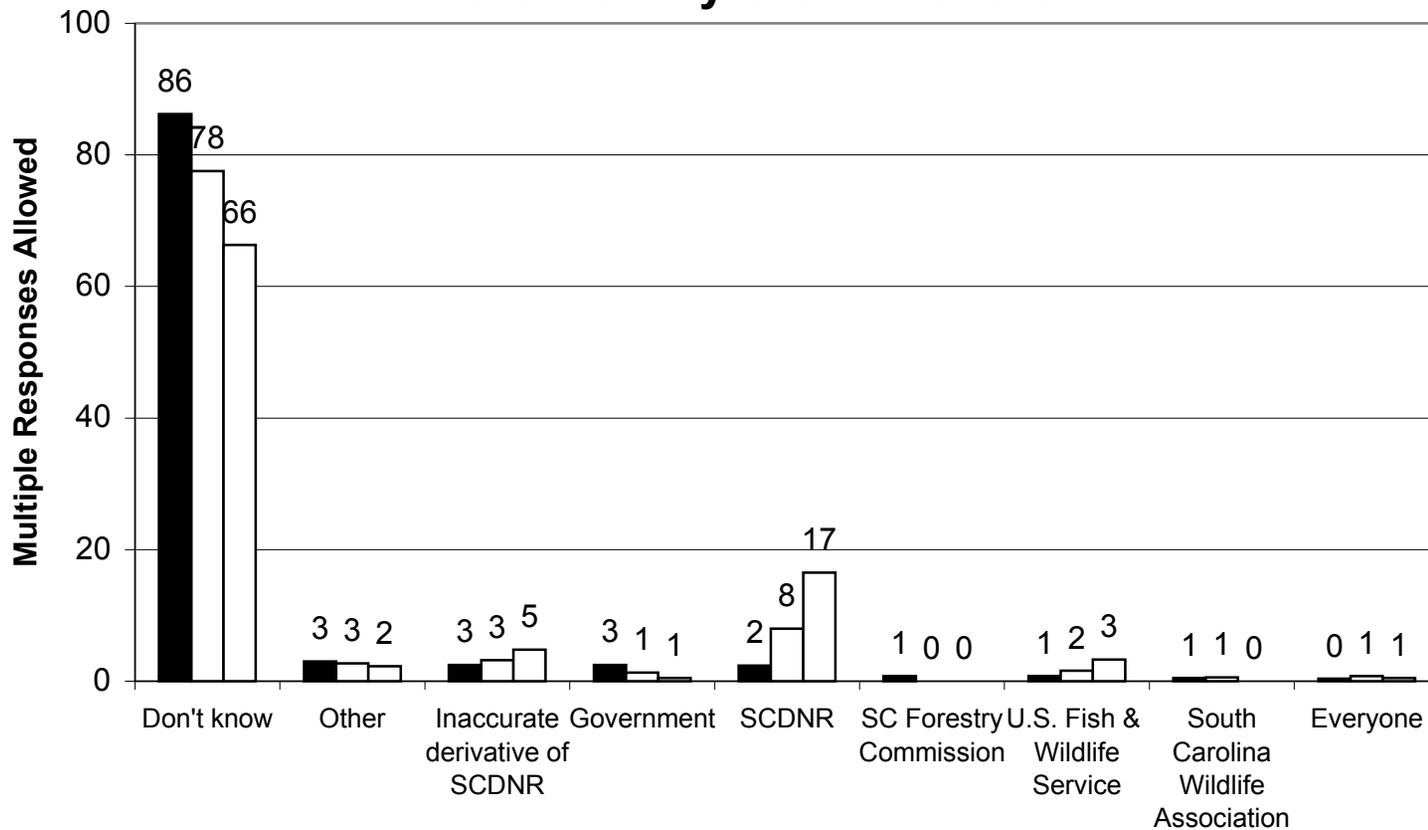
Q81. Would you like to learn more in your school class about South Carolina's rivers, ponds, lakes and streams and the animals and plants that live there? By Grade Cohort.



Q82. Would you like to learn more in your school class about fishing? By Grade Cohort.



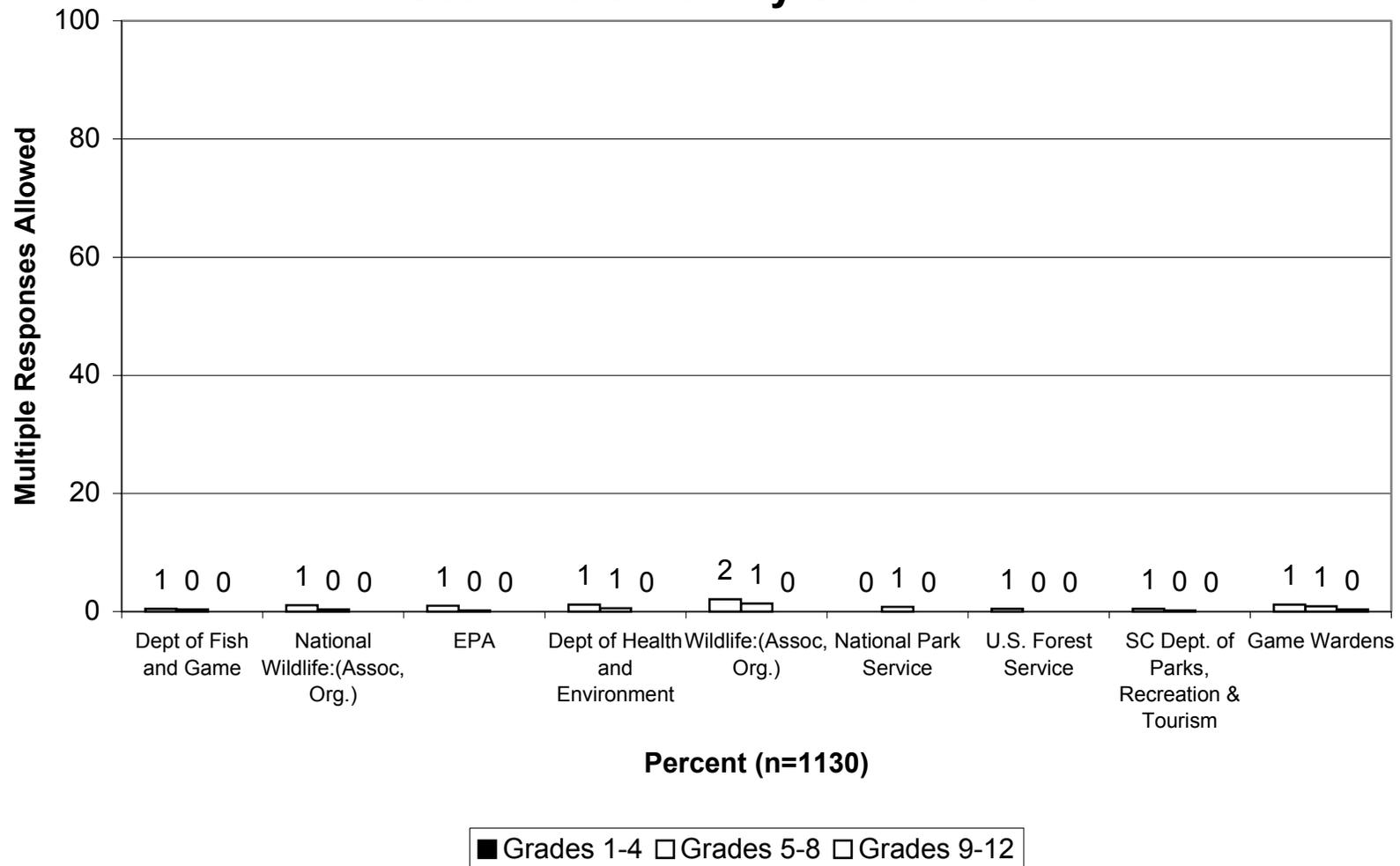
Q84. Who do you think is the state agency responsible for managing and conserving fish and wildlife in South Carolina? By Grade Cohort.



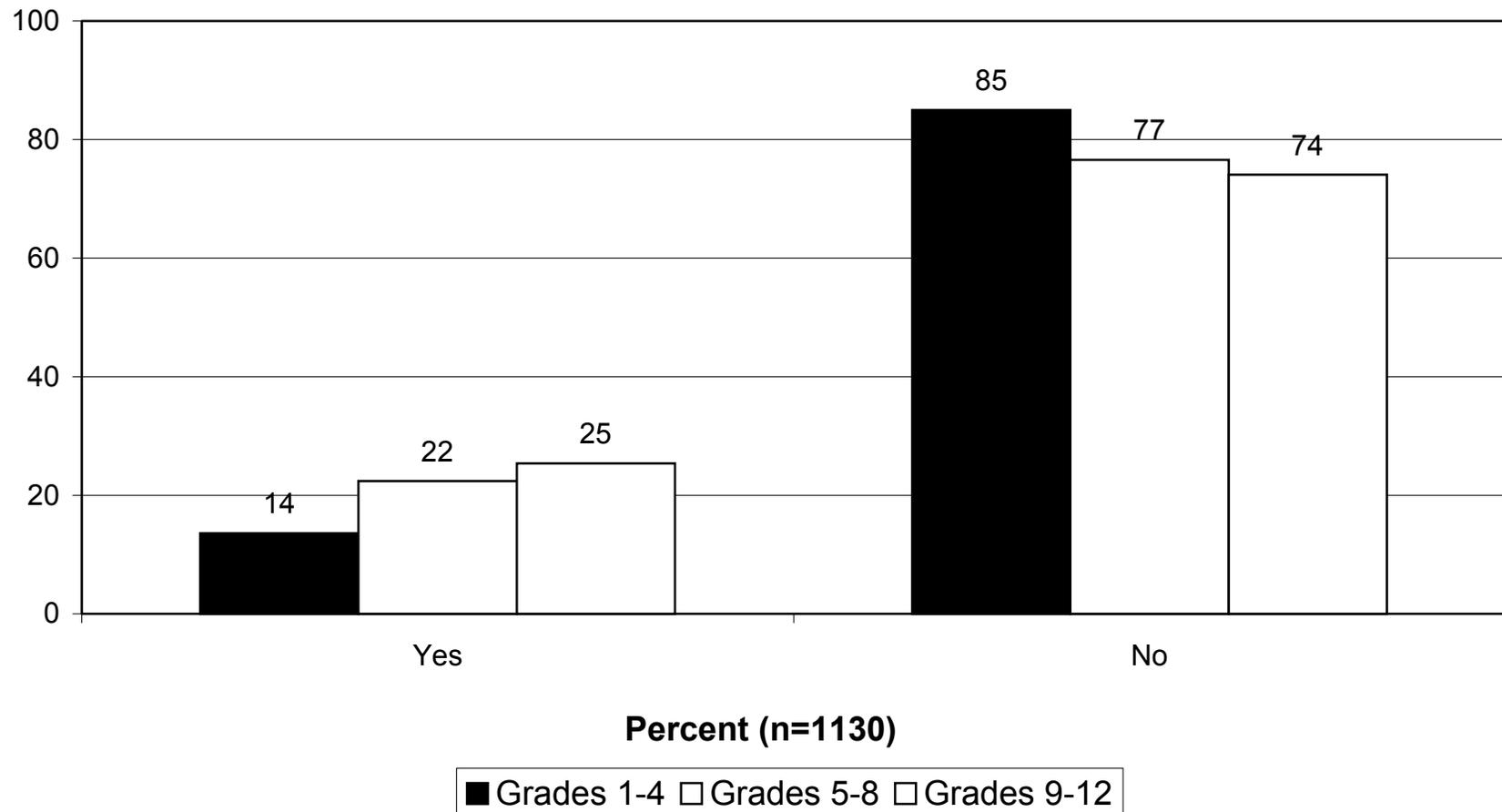
Percent (n=1130)

■ Grades 1-4 □ Grades 5-8 □ Grades 9-12

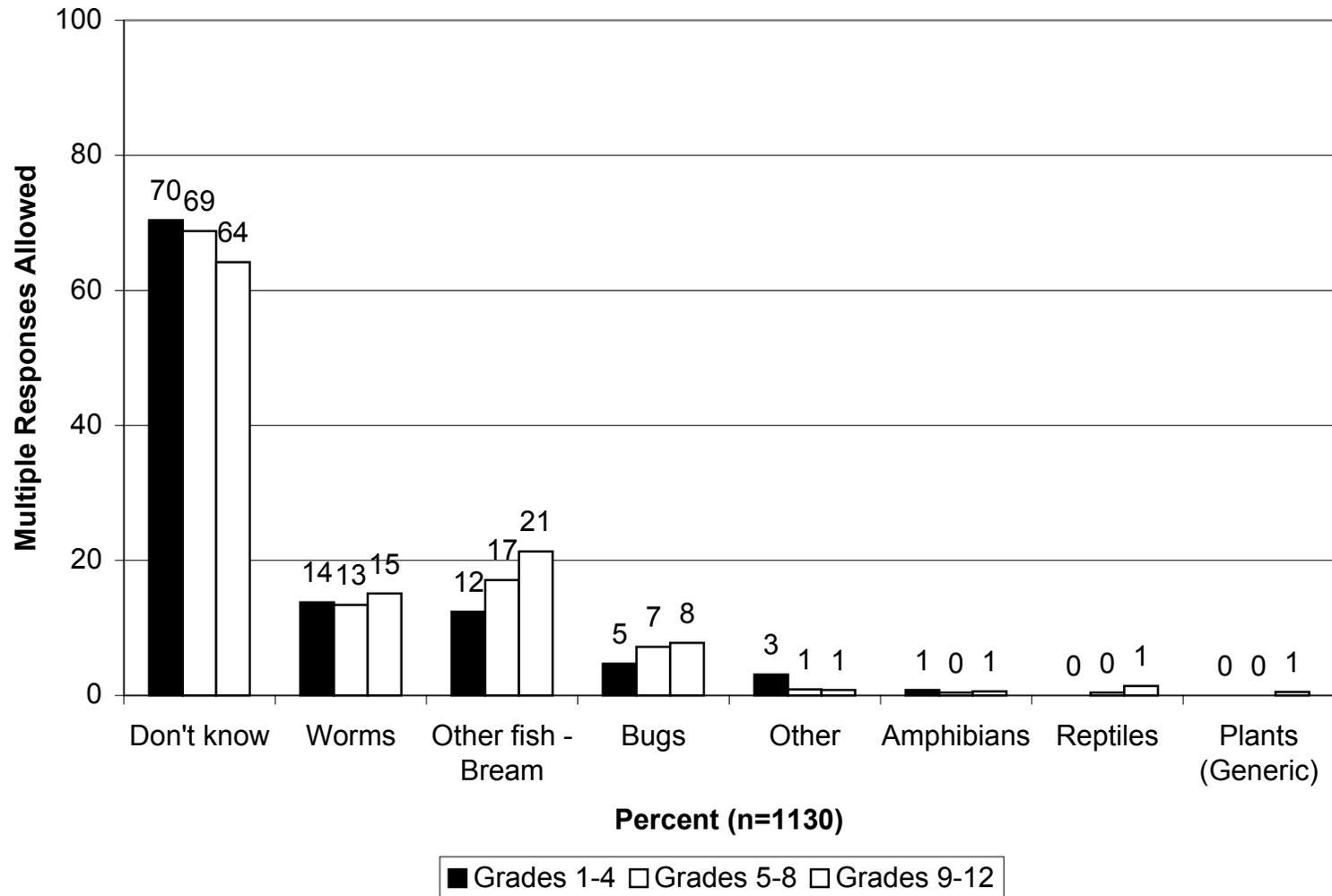
Q84. Cont'd. Who do you think is the state agency responsible for managing and conserving fish and wildlife in South Carolina? By Grade Cohort.



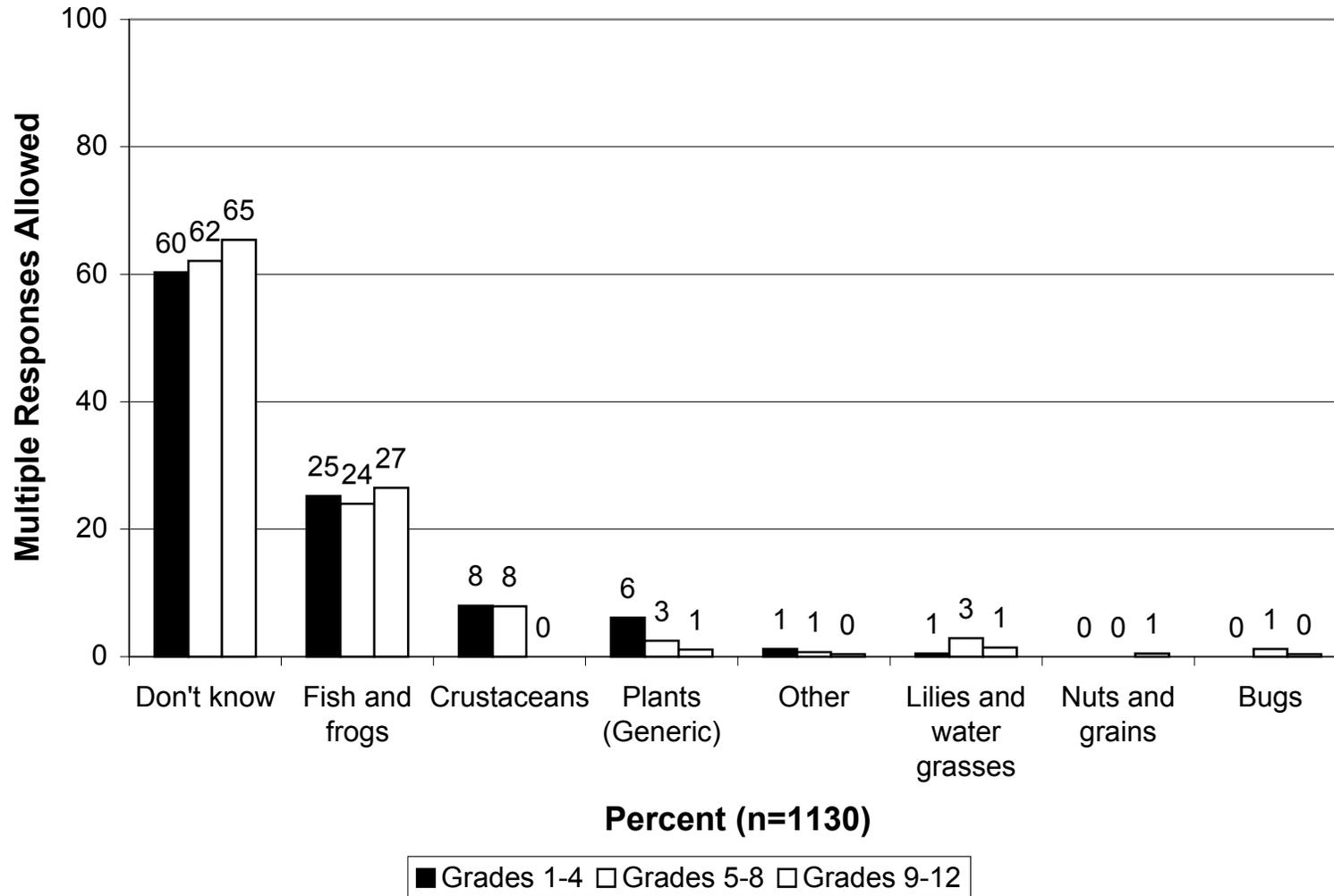
**Q86. The South Carolina DNR provides a number of fishing programs, such as "Hooked on Fishing," the "Fishing Tackle Loaner Program," and "South Carolina Reel Kids," to name a few. Have you heard of any of these programs?
By Grade Cohort.**



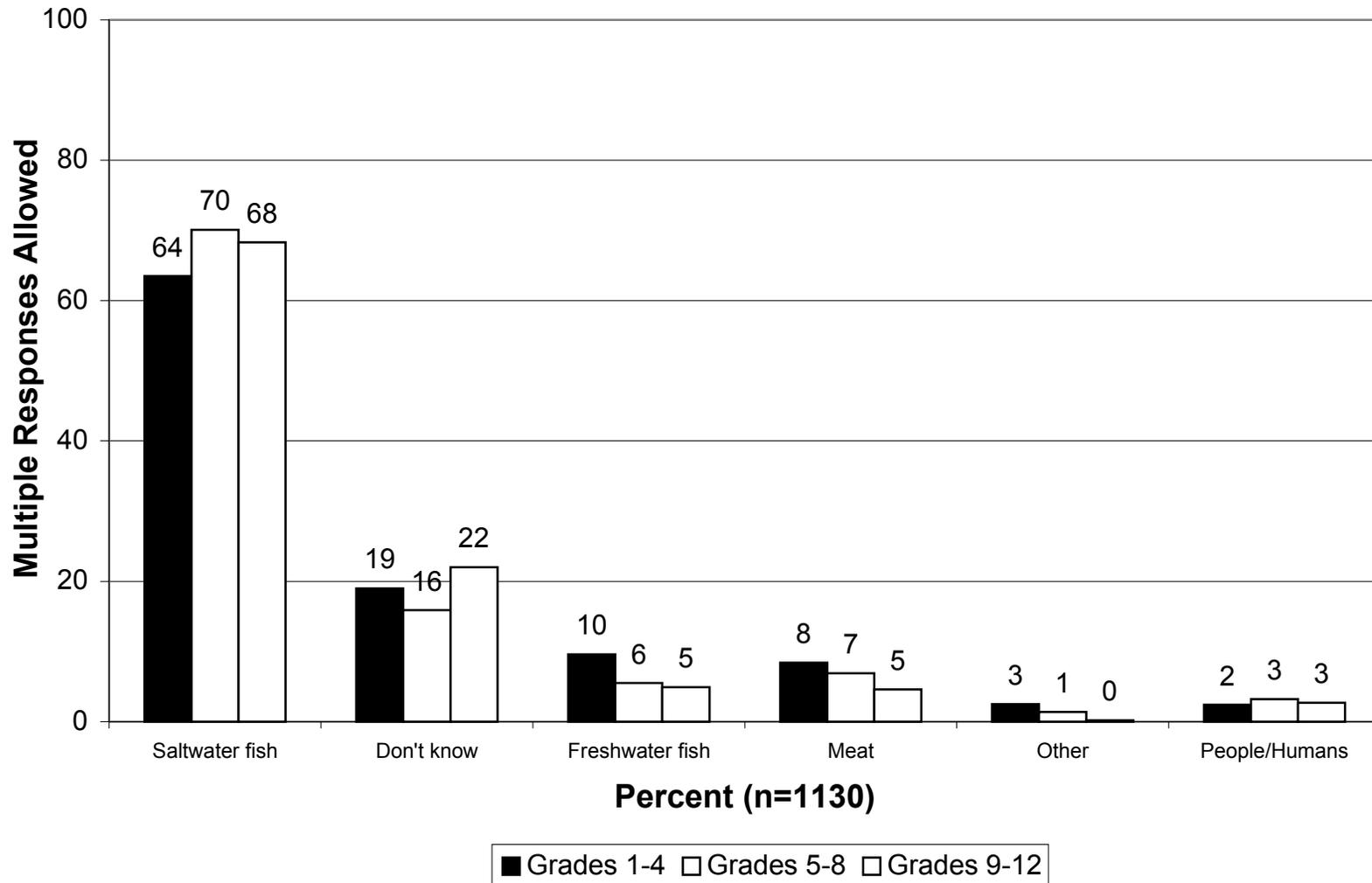
Q90. What kind of food do largemouth bass eat? By Grade Cohort.



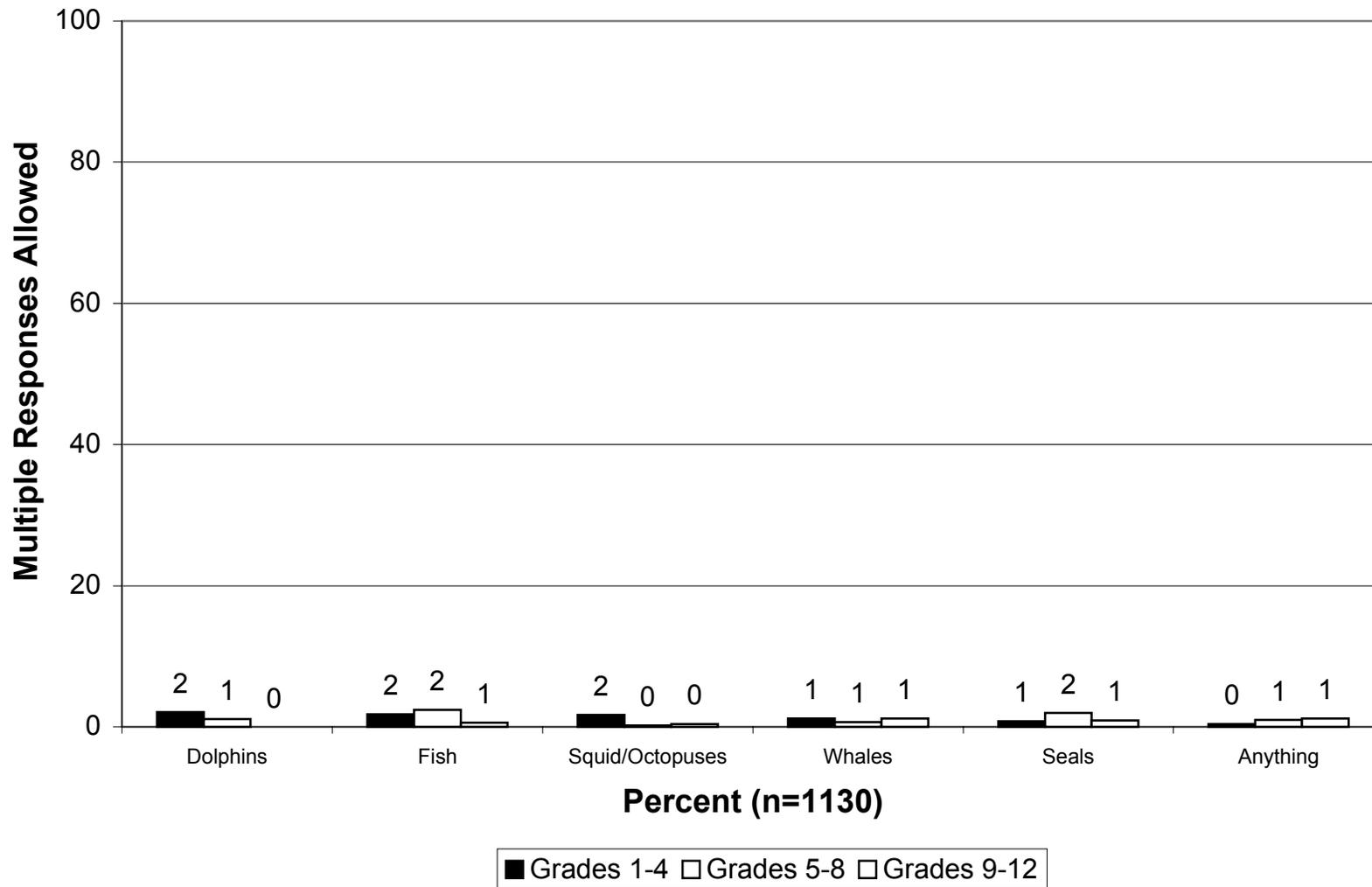
Q93. What does a River Otter usually eat? By Grade Cohort.



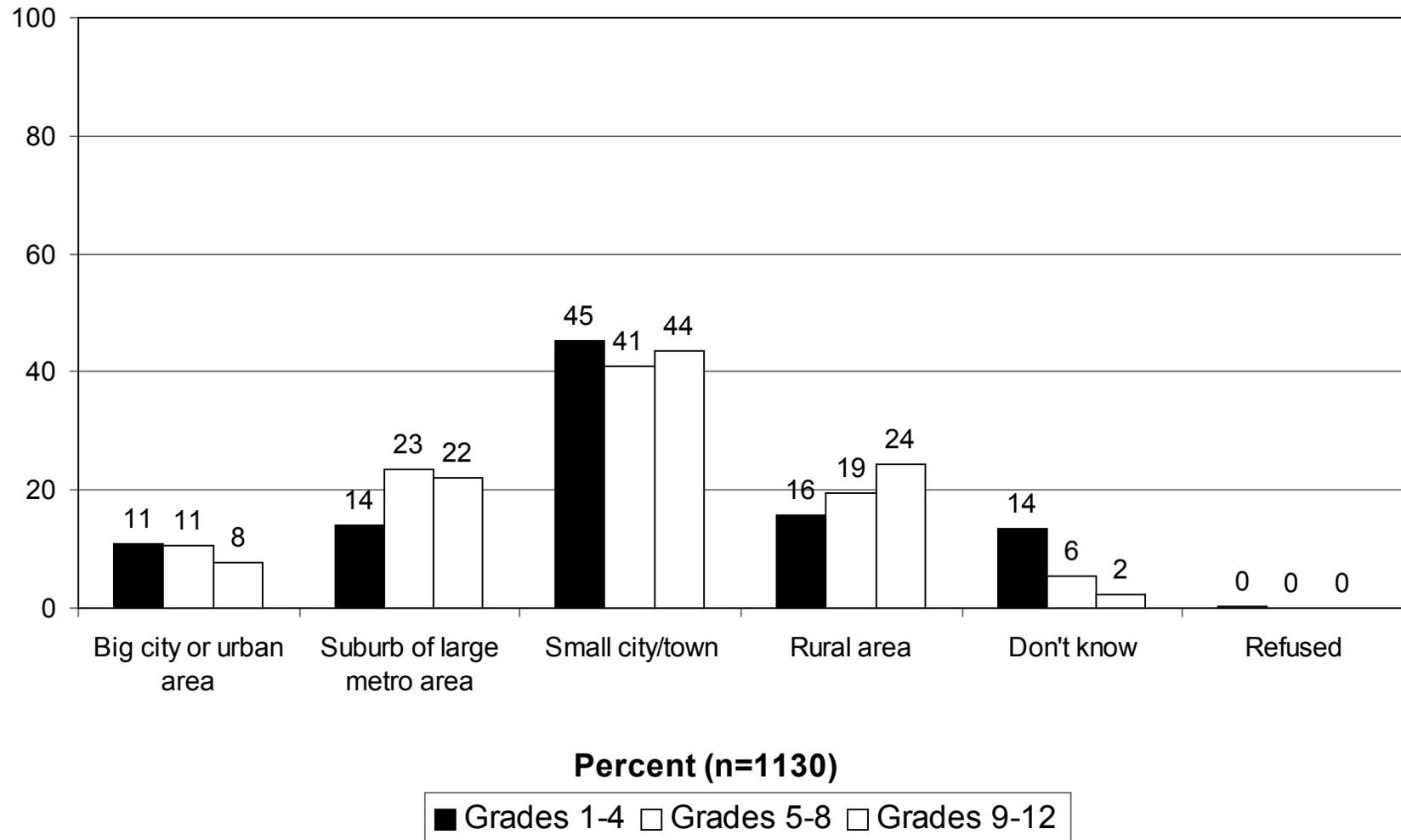
Q96. What type of food do sharks usually eat? By Grade Cohort.



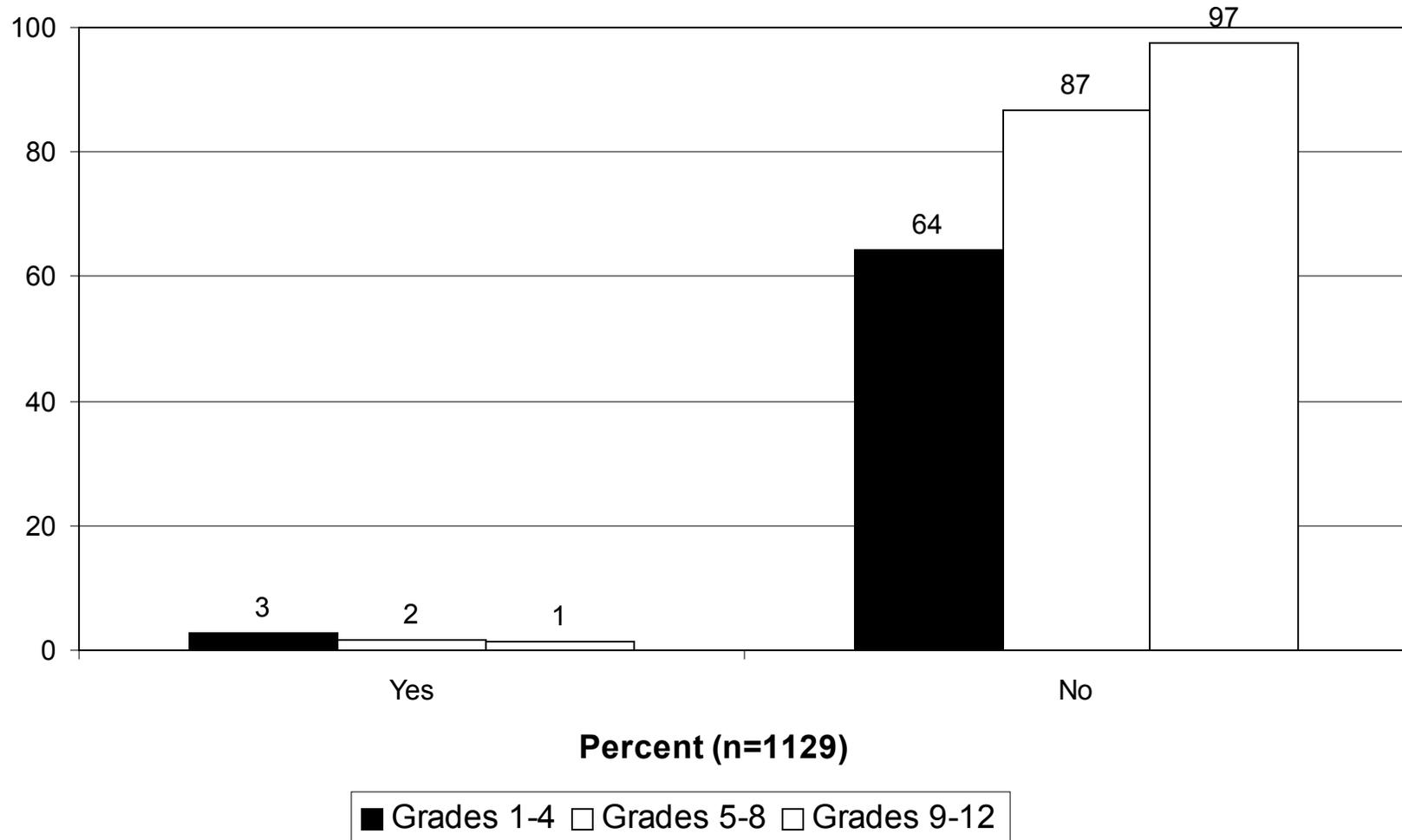
Q96. Cont'd. What type of food do sharks usually eat? By Grade Cohort.



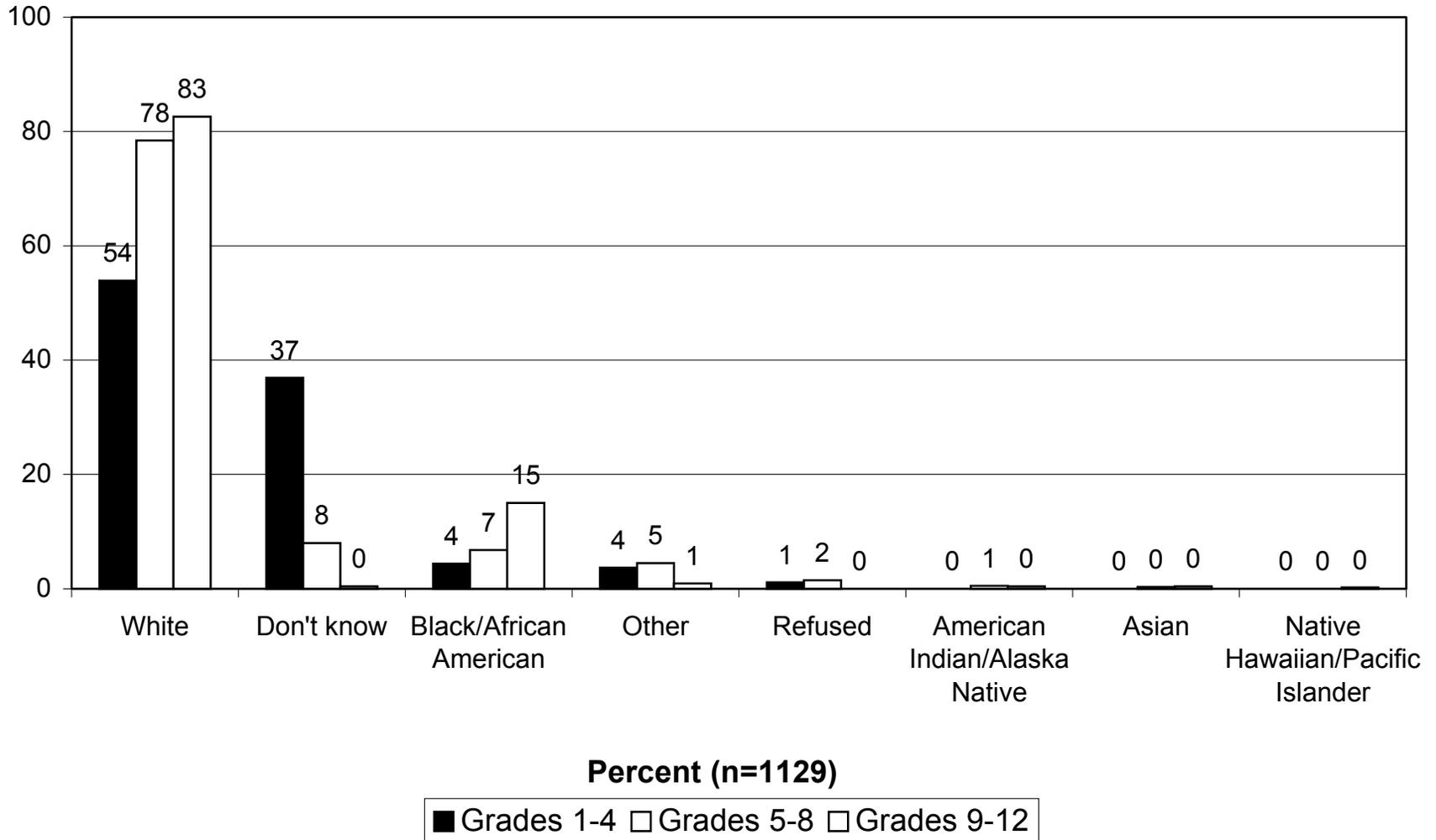
**Q99. Do you consider where you live to be a big city, a suburban area, a small city/town or a rural area?
By Grade Cohort.**



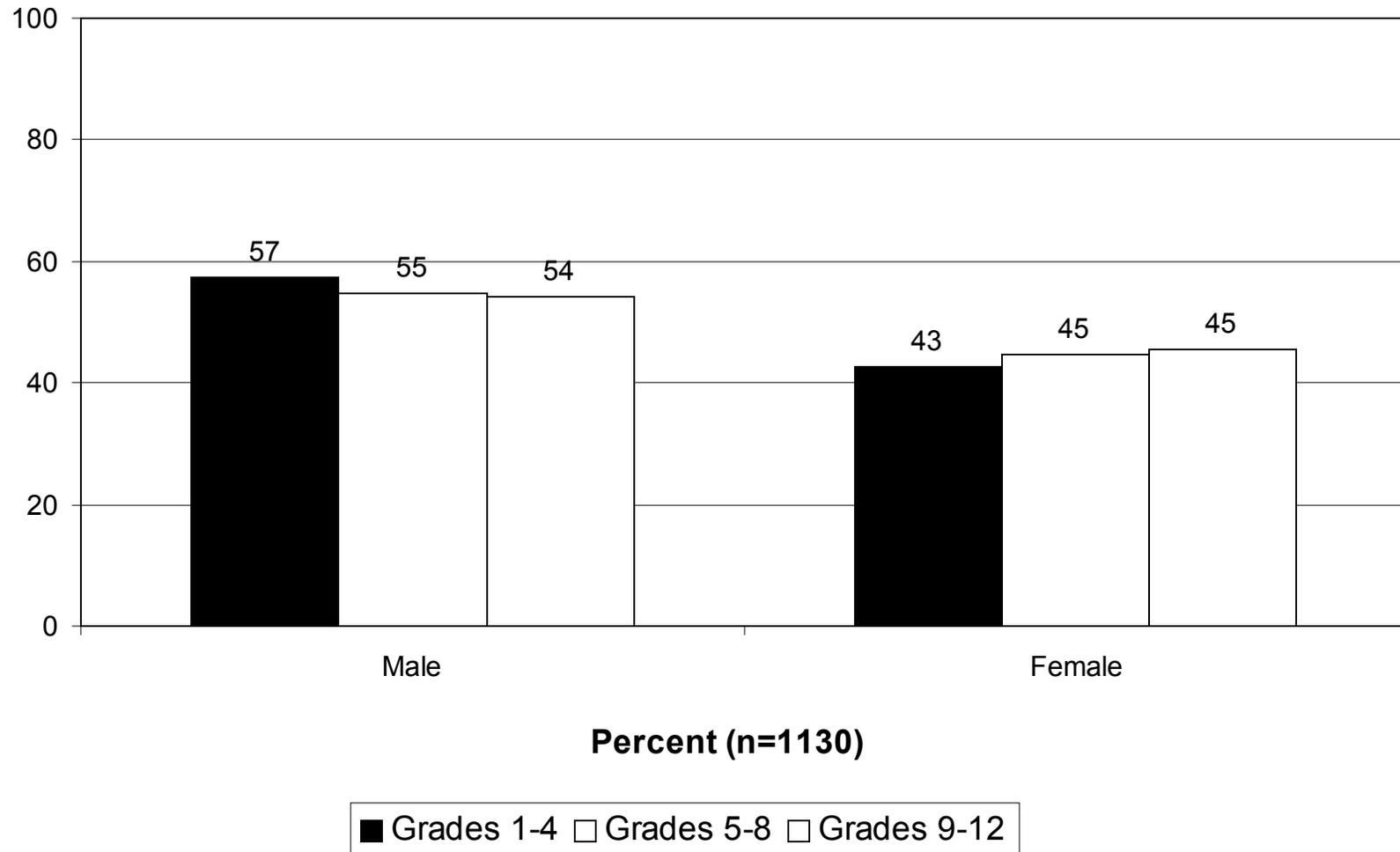
Q101. Are you of Hispanic or Latino ethnicity? By Grade Cohort.



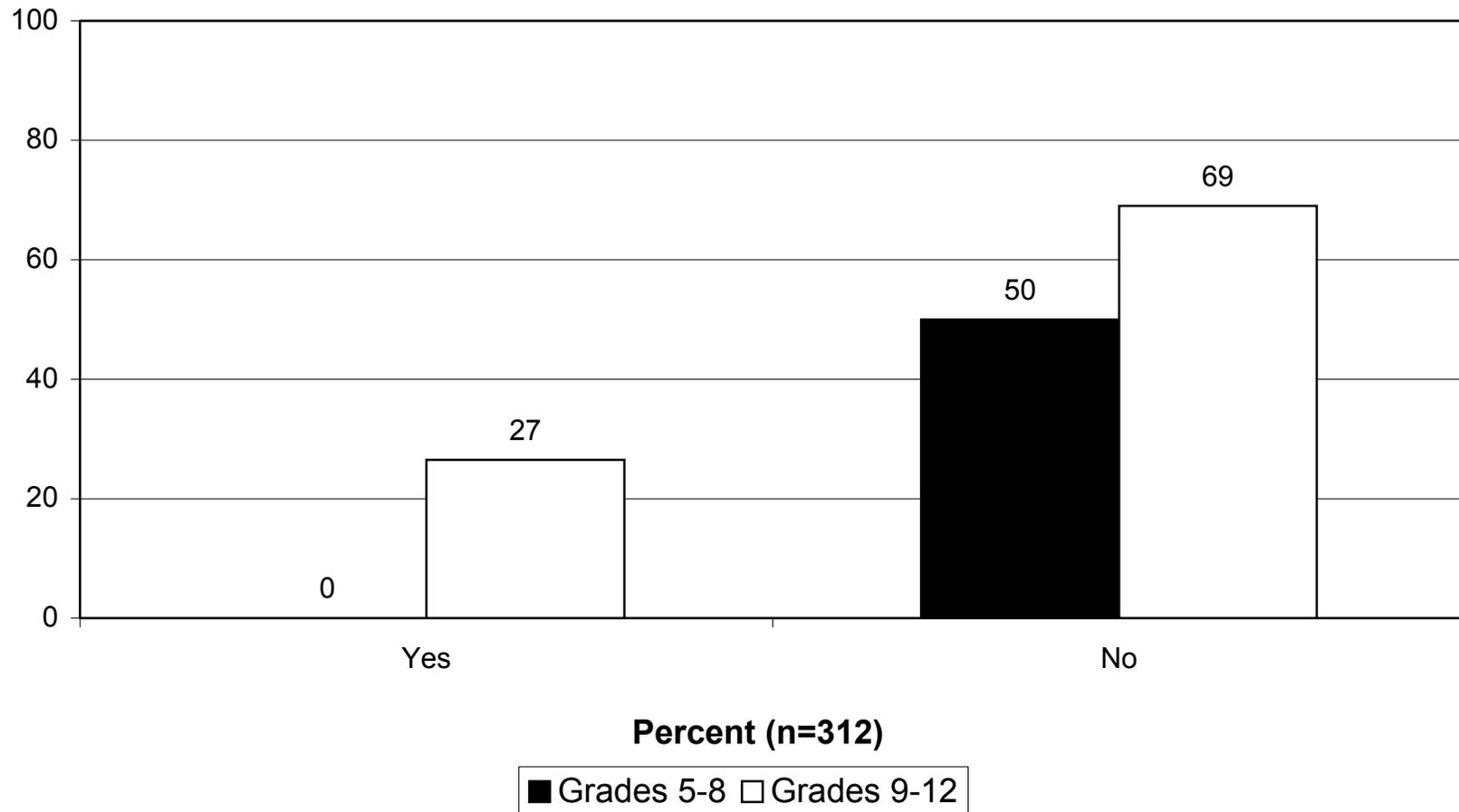
Q102. What race do you consider yourself? By Grade Cohort.



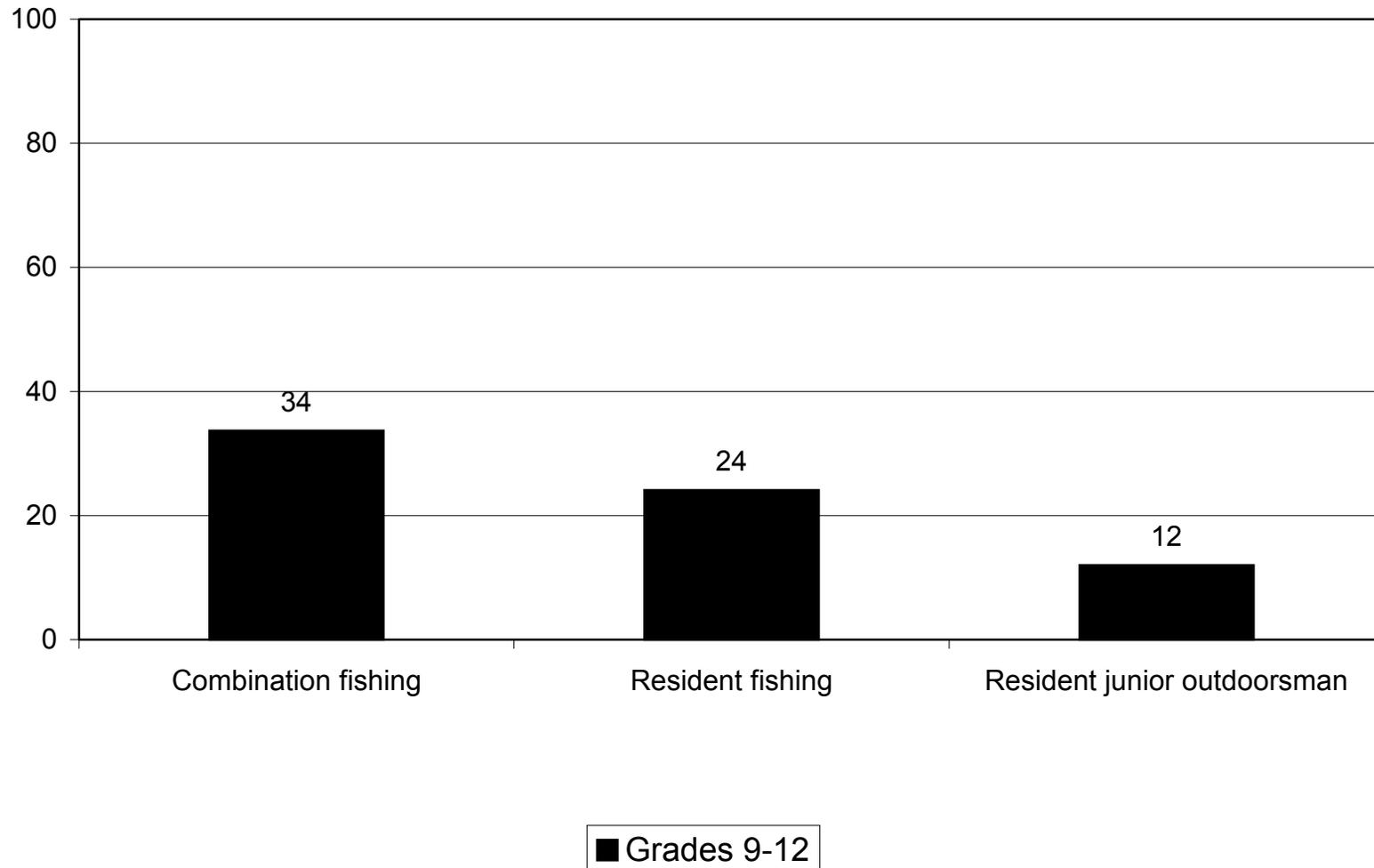
Q103. And what is your gender? By Grade Cohort.



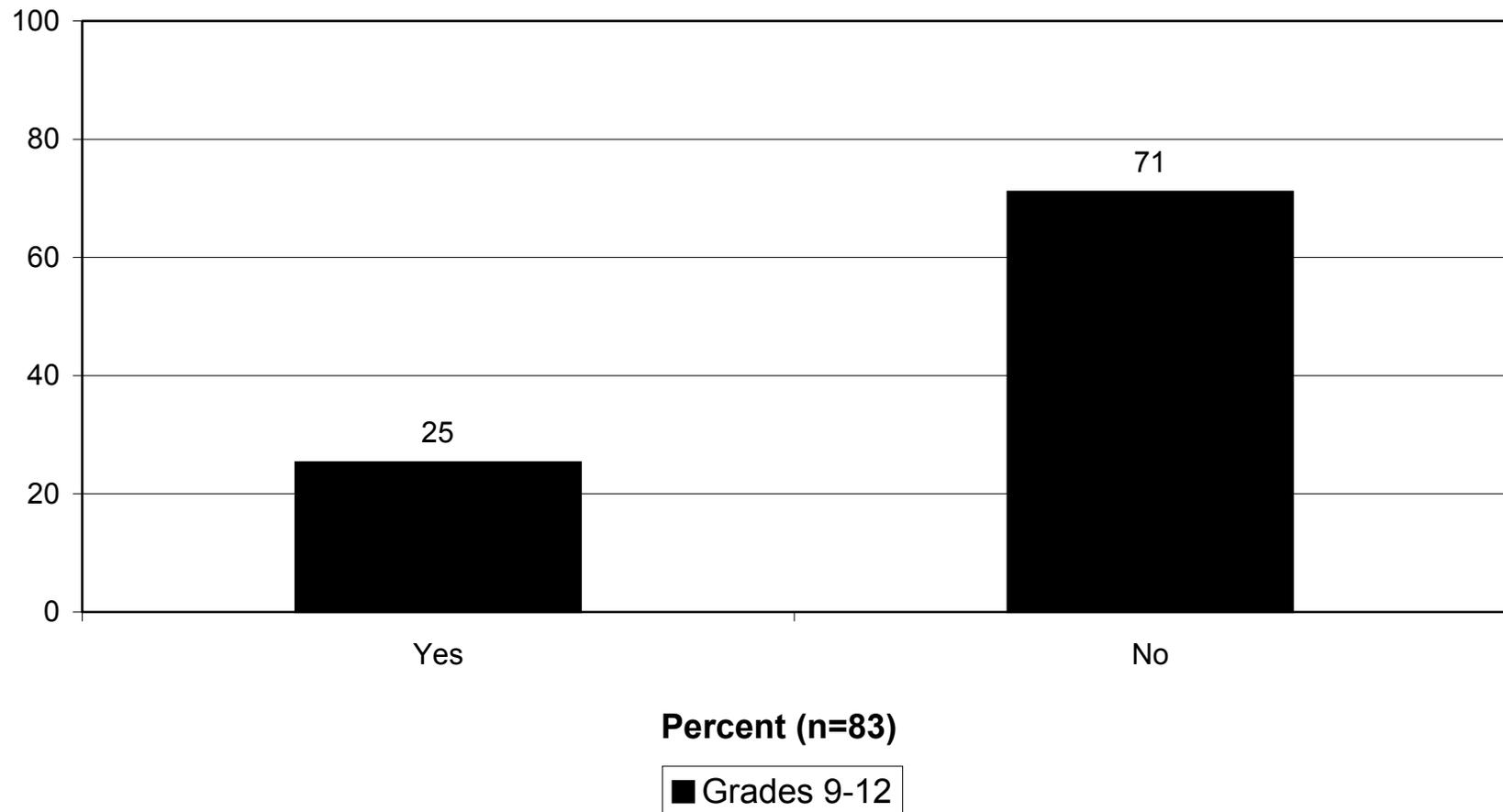
**Q105. Have you purchased a South Carolina fishing license? By Grade Cohort.
(asked of those aged 16 or older).**



Q106. What type of South Carolina fishing license did you buy? (asked of those who reported purchasing a South Carolina fishing license). By Grade Cohort.



Q107. Does the fact that you are required to buy a fishing license keep you from buying a license and going fishing? (asked of those who reported purchasing a South Carolina fishing license). By Grade Cohort.



5. When would be a more convenient time to call you back?
Thank you for your time.

WHENCALL

ENTER DAY AND TIME ON CALLSHEET (CB)

SKIP TO QUESTION 112

=====

6. First, I'm going to read you a list of activities and I would like for you to tell me which activities you participated in within the past 12 months (that is, since last year at this time).

OUTDOR

Please press ENTER to continue...

SKIP TO QUESTION 8

=====

7. YOU DID NOT USE SPACE BAR

NOSPAC1

PRESS ENTER TO TRY AGAIN

8. Did you participate in...? (READ LIST; CHECK IF YES)

OUT 1:8-26

(CHECK ALL THAT APPLY)

- 1. Water skiing
- 2. Hiking
- 3. Watching wild animals or bird watching
- 4. Visited a state or National Park
- 5. Biking
- 6. Rock climbing
- 7. Camping in a tent
- 8. Camping in a recreational vehicle, such as a Winnebago
- 9. Camping in a wilderness area
- 10. Motor boating
- 11. Jet skiing
- 12. Canoeing or kayaking
- 13. Sailing
- 14. Row boating
- 15. Target shooting
- 16. Hunting big game, such as deer or turkey or bear
- 17. Hunting squirrel, rabbits, or other small animals
- 18. Hunting waterfowl, such as ducks or geese
- 19. (DNR: None of these)

IF (#8 = 0) GO TO #7

2000 South Carolina Kids' Aquatic Survey

Page 3

9. Have you ever gone fishing in your life?

LIFE 1:27

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 9)
- 2. Yes (GO TO QUESTION 10)
- 3. No
- 4. Don't know

SKIP TO QUESTION 26

=====

10. Would you say you like fishing a lot, a little, or not at all

LIKEFISH 1:28

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 10)
- 2. A lot
- 3. A little
- 4. Not at all
- 5. Don't know

11. Have you gone fishing within the past 12 months?

HFISH 1:29

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 11)
- 2. Yes (GO TO QUESTION 12)
- 3. No
- 4. Don't know

SKIP TO QUESTION 16

=====

12. Within the past 12 months, did you go fishing in freshwater, like in ponds, lakes, streams, or reservoirs?

FRESH 1:30

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another (GO TO QUESTION 12)
- 2. Yes
- 3. No
- 4. Don't know

13. Within the past 12 months, did you go fishing in saltwater, such as at the beach or in the ocean?

SALT 1:31

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another (GO TO QUESTION 13)
- 2. Yes
- 3. No
- 4. Don't know

IF (#12 = 2) GO TO #14

IF (#13 = 2) GO TO #14

SKIP TO QUESTION 15

=====

14. Which do you do more: fish in freshwater or in saltwater, or do you do both about the same?

(READ SCALE AS NECESSARY)

SBOTH 1:32

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another (GO TO QUESTION 14)
- 2. Freshwater
- 3. Saltwater
- 4. Both about the same
- 5. Don't know

15. When was the last time you went fishing? Did you go this spring, this past winter, last fall, last summer or last spring?

(READ LIST)

LASTFISH 1:33

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another (GO TO QUESTION 15)
- 2. This spring
- 3. Last winter
- 4. Last fall
- 5. Last summer
- 6. Last spring
- 7. Don't remember

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16. About how many times per year do you go fishing?
 (PORTIONS OF A DAY COUNT AS A WHOLE DAY; MULTIPLE OUTINGS IN ONE
 DAY COUNT AS A SINGLE DAY)
 (ENTER 999 FOR DON'T KNOW)

TIMES 1:34-36

|_|_|_|_|

SKIP TO QUESTION 18

=====

17. YOU DID NOT USE SPACE BAR

NOSPAC1B

PRESS ENTER TO TRY AGAIN

18. Who FIRST taught you how to fish?
 (DNR LIST; CHECK ALL THAT APPLY)

TAUGHT 1:37-51

(CHECK ALL THAT APPLY)

- | | |
|---|-------------------------|
| _ | 1. Mom |
| _ | 2. Dad |
| _ | 3. Brother |
| _ | 4. Sister |
| _ | 5. Friends the same age |
| _ | 6. Friends (older) |
| _ | 7. Friends (younger) |
| _ | 8. Aunt |
| _ | 9. Uncle |
| _ | 10. Cousin |
| _ | 11. Grandfather |
| _ | 12. Grandmother |
| _ | 13. Club members |
| _ | 14. Don't know |
| _ | 15. Other |

IF (#18 = 0) GO TO #17

IF (#18 @ 15) GO TO #19

SKIP TO QUESTION 21

=====

19. ENTER OTHER PEOPLE WHO TAUGHT THEM TO FISH
(IN FIRST PERSON; 120 CHARACTERS ALLOWED)

TAUGHTST 2:1-120

SKIP TO QUESTION 21

=====

20. YOU DID NOT USE SPACE BAR

NOSPAC2

PRESS ENTER TO TRY AGAIN

21. WHO do you usually go fishing with?
(DNR LIST; CHECK ALL THAT APPLY)

FISHWT 3:1-15

(CHECK ALL THAT APPLY)

- 1. Mom
- 2. Dad
- 3. Brother
- 4. Sister
- 5. Friends the same age
- 6. Friends (older)
- 7. Friends (younger)
- 8. Aunt
- 9. Uncle
- 10. Cousin
- 11. Grandfather
- 12. Grandmother
- 13. Club members
- 14. Don't know
- 15. Other

IF (#21 = 0) GO TO #20
IF (#21 @ 15) GO TO #22

SKIP TO QUESTION 24

=====

22. ENTER OTHER PEOPLE FISH WITH
(IN FIRST PERSON; 120 CHARACTERS ALLOWED)

FISHWST 4:1-120

SKIP TO QUESTION 24

=====

23. YOU DID NOT USE SPACE BAR

NOSPAC3

PRESS ENTER TO TRY AGAIN

24. What kind of fish do you usually fish for?
(DNR LIST; CHECK ALL THAT APPLY)

KFISH 5:1-18

(CHECK ALL THAT APPLY)

- 1. Anything that bites
- 2. American Shad
- 3. Crappie
- 4. Striped Bass/Hybrid Bass
- 5. Bowfin (Mudfish)
- 6. Carp
- 7. Pickerel (Jackfish)
- 8. Catfish
- 9. Bream (Sunfishes)
- 10. Trout
- 11. Bass
- 12. Spottail Bass
- 13. Flounder
- 14. Speckled Trout
- 15. Croaker
- 16. Shark
- 17. Don't know
- 18. Other

IF (#24 = 0) GO TO #23

IF (#24 @ 18) GO TO #25

SKIP TO QUESTION 26

=====

25. ENTER OTHER FISH
(IN FIRST PERSON; 120 CHARACTERS ALLOWED)

KFISHST 6:1-120

26. If you could change how much you go fishing, would you go fishing more, about the same, or less? Or are you not interested in going fishing?

FISHMORE 7:1

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 26)
- 2. More
- 3. About the same
- 4. Less
- 5. Not interested in fishing
- 6. Don't know

27. What is the MAIN reason why you would go fishing?
(DNR LIST; CHECK ONLY ONE ANSWER)

MAIN 7:2-3

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 27)
- 2. To be with friends
- 3. To be with family
- 4. To catch fish
- 5. To catch big fish
- 6. For the sport or to learn a new sport
- 7. To learn about nature
- 8. To have fun
- 9. To relax
- 10. To compete
- 11. To be close to nature/to be outside
- 12. Other
- 13. Don't know

SKIP TO QUESTION 29

=====

28. YOU DID NOT USE
YOUR SPACE BAR

NOSPAC4

PRESS ENTER TO TRY AGAIN

29. In general, what are some of the reasons why you DON'T go fishing more often? (DNR LIST; CHECK ALL THAT APPLY)

WHYNO3 7:4-21

(CHECK ALL THAT APPLY)

- 1. I go as often as I want
- 2. Not interested
- 3. Other interests/hobbies
- 4. Not enough time
- 5. Parents won't let me go
- 6. Boring
- 7. No one to go with
- 8. Don't catch enough fish
- 9. Don't know how to fish
- 10. Don't know where to go/Hard to find a good location
- 11. Costs/too expensive
- 12. Transportation/No way to get there
- 13. Fishing regulations too complex
- 14. School obligations
- 15. Church obligations
- 16. Weather/Bugs
- 17. It's gross
- 18. Other (GO TO QUESTION 30)

IF (#29 = 0) GO TO #28

IF (#29 @ 4) GO TO #32

IF (#29 @ 5) GO TO #35

SKIP TO QUESTION 37

=====

30. ENTER OTHER REASONS FOR NOT GOING FISHING (USE FIRST PERSON)

WHYNO3ST 8:1-120

IF (#29 @ 4) GO TO #32

IF (#29 @ 5) GO TO #35

SKIP TO QUESTION 37

=====

31. YOU DID NOT USE YOUR SPACE BAR

NOSPAC5

PRESS ENTER TO TRY AGAIN

32. What are the specific reasons you don't have enough time to go fishing? (DNR LIST; CHECK ALL THAT APPLY)

NOTIME 9:1-10

(CHECK ALL THAT APPLY)

- 1. Work
- 2. School
- 3. Family obligations
- 4. Church obligations
- 5. Other sports/hobbies
- 6. Need to buy a license
- 7. Need to buy equipment
- 8. No place nearby/too much travel time
- 9. Don't know
- 10. Other (GO TO QUESTION 33)

IF (#32 = 0) GO TO #31

IF (#29 @ 5) GO TO #35

SKIP TO QUESTION 37

=====

33. ENTER OTHER SPECIFIC REASONS FOR NOT HAVING ENOUGH TIME TO FISH (IN FIRST PERSON; 120 CHARACTERS ALLOWED)

NOTIMEST 10:1-120

IF (#29 @ 5) GO TO #35

SKIP TO QUESTION 37

=====

34. YOU DID NOT USE YOUR SPACE BAR

NOSPAC6

PRESS ENTER TO TRY AGAIN

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35. You said your parents would not let you go fishing? What, specifically, are the reasons for this?

(DNR LIST; CHECK ALL THAT APPLY)

PARNO 11:1-12

(CHECK ALL THAT APPLY)

- 1. Parents do not fish
- 2. Parents no time: work
- 3. Parents no time: family obligations
- 4. School
- 5. Involved in sports/hobbies/clubs
- 6. Need to buy a license
- 7. Need to buy equipment
- 8. No place nearby/too much travel time
- 9. Not safe
- 10. Don't know
- 11. Other (GO TO QUESTION 36)
- 12. Don't know

IF (#35 = 0) GO TO #34

SKIP TO QUESTION 37

=====

36. ENTER OTHER REASONS PARENTS WON'T TAKE YOU FISHING.
(IN FIRST PERSON; 120 CHARACTERS ALLOWED)

PARNOST 12:1-120

37. Do both of your parents fish, or does only your mother or your father fish?

TWO PAR 13:1

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 37)
- 2. Both
- 3. Mother (GO TO QUESTION 38)
- 4. Father (GO TO QUESTION 39)
- 5. Don't know (GO TO QUESTION 41)
- 6. Neither fish (GO TO QUESTION 41)

38. Does your mom fish a lot, a little, or not much at all?

MOMFISH 13:2

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 38)
- 2. A lot
- 3. A little
- 4. Not much at all
- 5. Don't know

IF (#37 = 2) GO TO #39

SKIP TO QUESTION 41

=====

39. Does your dad fish a lot, a little, or not much at all?

DADFISH 13:3

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 39)
- 2. A lot
- 3. A little
- 4. Not much at all
- 5. Don't know

SKIP TO QUESTION 41

=====

40. YOU DID NOT USE SPACE BAR

NOSPAC7

PRESS ENTER TO TRY AGAIN

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41. Considering everyone you could go fishing with, who would you most like to go fishing with?

(DNR LIST; CHECK ALL THAT APPLY)

RATHER 13:4-18

(CHECK ALL THAT APPLY)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | 1. Alone |
| <input type="checkbox"/> | 2. Mom |
| <input type="checkbox"/> | 3. Dad |
| <input type="checkbox"/> | 4. Brother |
| <input type="checkbox"/> | 5. Sister |
| <input type="checkbox"/> | 6. Aunt/Uncle |
| <input type="checkbox"/> | 7. Grandparent(s) |
| <input type="checkbox"/> | 8. Other family member(s) |
| <input type="checkbox"/> | 9. Friends |
| <input type="checkbox"/> | 10. Neighbors |
| <input type="checkbox"/> | 11. School group |
| <input type="checkbox"/> | 12. Church group |
| <input type="checkbox"/> | 13. After-school club (e.g., Girl Scouts, Cub Scouts, ...) |
| <input type="checkbox"/> | 14. Don't know |
| <input type="checkbox"/> | 15. Other |

IF (#41 = 0) GO TO #40

IF (#41 = 15) GO TO #42

SKIP TO QUESTION 43

=====

42. ENTER OTHER PERSON TO FISH WITH
(IN FIRST PERSON; 120 CHARACTERS ALLOWED)

RATHST 14:1-120

43. Would you say that a lot, a few, or none of your friends fish?

FRIENDF 15:1

(CHECK ONLY ONE ANSWER)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 43) |
| <input type="checkbox"/> | 2. A lot |
| <input type="checkbox"/> | 3. A few |
| <input type="checkbox"/> | 4. None |
| <input type="checkbox"/> | 5. Don't know |

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44. How cool do you think kids your age think fishing is? Is it very cool, a little cool, or not cool at all?

(READ SCALE AS NECESSARY; PROMPT FOR DEGREE)

COOL 15:2

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 44)
- 2. Very cool
- 3. A little cool
- 4. Not cool at all
- 5. Don't know

SKIP TO QUESTION 46

=====

45. YOU DID NOT USE SPACE BAR

NOSPAC8

PRESS ENTER TO TRY AGAIN

46. Now, I am going to read you a list of different types of fishing and I would like to know if you are interested in participating in any of these activities. Are you interested in...?

(READ LIST; CHECK IF YES)

INT 15:3-10

(CHECK ALL THAT APPLY)

- 1. Fly fishing
- 2. Deep-sea fishing
- 3. Bait fishing
- 4. Fishing from a boat
- 5. Fishing from the bank of a lake or river
- 6. Fishing from the beach
- 7. Fishing at a spot in your area made for fishing
- 8. (DNR: None of these)

IF (#46 = 0) GO TO #45

47. The South Carolina Department of Natural Resources holds fishing events and classes to help kids learn about lakes, ponds and rivers and the animals that live there. They also hold events that teach kids about fishing.

Now, I am going to read you a list of things they might do at these events and classes, and I would like to know if it would make the event or class better or worse or not make any difference.

SCDNR

Please press ENTER to continue...

48. What if you LEARNED TO FISH BETTER? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

FISHBET 15:11

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 48)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

49. What if you LEARNED ABOUT FISHING EQUIPMENT? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

FISHEQ 15:12

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 49)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

50. What if you were able TO FISH AT THE EVENT OR CLASS? Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

FISHAT 15:13

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 50)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

51. What if you LEARNED WHERE YOU COULD GO FISHING after the event or class? Would it make the event or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

WHEREFSH 15:14

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 51)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

52. What if you GOT TO KEEP THE FISH YOU CAUGHT? (Would it make the event or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

KEEPFSH 15:15

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 52)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

53. What if you GOT TO EAT THE FISH YOU CAUGHT? (Would it make the event or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

EATFSH 15:16

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 53)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

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54. What if you GOT TO KEEP THE FISHING EQUIPMENT--rod, reel, tackle)? (Would it make the event or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

TACKLE 15:17

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 54)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

55. What if you could BE THERE WITH YOUR FRIENDS? (Would it make the event or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

BEFRND 15:18

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 55)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

56. What if you could BE THERE WITH YOUR PARENTS? (Would it make the event or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

BEPAR 15:19

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 56)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

57. What if you could WIN PRIZES? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

PRIZE 15:20

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 57)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

58. What if you could LEARN TO IDENTIFY FISH AND ALSO FACTS ABOUT FISH? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

FACTS 15:21

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 58)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

59. What if you received a CERTIFICATE FOR ATTENDING? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

CERTIF 15:22

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 59)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

60. What if you learned how to SAFELY HANDLE AND RELEASE A FISH?
(Would it make the event or class better, worse, or not make any
difference?)

(READ SCALE AS NECESSARY)

SAFEHR 15:23

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 60)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

61. What if you learned how to FISH SAFELY such as how to cast
properly and that hooks are sharp? Would it make the event or
class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

FSAFE 15:24

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 61)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

62. What if you could CATCH A LOT OF FISH? (Would it make the event
or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

LOTFISH 15:25

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 62)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

63. What if you could CATCH A BIG FISH? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

BIGFISH 15:26

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 63)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

64. What if you could ENJOY NATURE AND THE OUTDOORS while at this event? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

NATURE 15:27

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 64)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

65. What if you could RELAX AND JUST GET AWAY FROM IT ALL WHILE FISHING at this event? (Would it make the event or class better, worse, or not make any difference?)
(READ SCALE AS NECESSARY)

RELAX 15:28

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 65)
- 2. Better
- 3. Worse
- 4. Not make any difference
- 5. Don't know

66. What if you went DURING SCHOOL TIME AS ON A FIELD TRIP? (Would it make the event or class better, worse, or not make any difference?)

(READ SCALE AS NECESSARY)

FTRIP 15:29

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 66)
 2. Better
 3. Worse
 4. Not make any difference
 5. Don't know

67. Have you ever played a computer fishing game or hand-held fishing game?

COMPUTE 15:30

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 67)
 2. Yes
 3. No
 4. Don't know

68. Do you use the Internet?

INTERN 15:31

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 68)
 2. Yes (GO TO QUESTION 69)
 3. No
 4. Don't know

SKIP TO QUESTION 72

=====

69. Do you use the Internet to find information about fishing?

INTERN2 15:32

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 69)
 2. Yes
 3. No
 4. Don't know

70. Do you use the Internet to find information about aquatic animals?

INTERN3 15:33

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 70)
- 2. Yes
- 3. No
- 4. Don't know

71. Do you use the Internet to find information about aquatic habitats?

INTERN4 15:34

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 71)
- 2. Yes
- 3. No
- 4. Don't know

72. Within the past 12 months, have you seen or heard any information from teachers or other adults IN YOUR SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?

INSIDE 15:35

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 72)
- 2. Yes (GO TO QUESTION 73)
- 3. No
- 4. Don't know

SKIP TO QUESTION 74

=====

73. What did you see or hear IN SCHOOL that helped you learn more about fishing or that increased your interest in going fishing? (IN FIRST PERSON; 120 CHARACTERS ALLOWED.)

WHAT 16:1-120

74. Within the past 12 months, have you seen or heard any information OUTSIDE OF SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?

OUTSIDE 17:1

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 74)
 2. Yes (GO TO QUESTION 75)
 3. No
 4. Don't know

SKIP TO QUESTION 76

=====

75. What did you see or hear OUTSIDE OF SCHOOL that helped you learn more about fishing or that increased your interest in going fishing?

(IN FIRST PERSON: 120 CHARACTERS ALLOWED.)

WHAT2 18:1-120

76. Within the past 12 months, did your school class do anything to help you learn about the oceans and the animals and plants that live there?

SCLEARN 19:1

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 76)
 2. Yes
 3. No
 4. Don't know

77. Within the past 12 months, did your school class do anything to help you learn about South Carolina rivers, ponds, lakes or streams and the animals and plants that live there?

AQUAR 19:2

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 77)
 2. Yes
 3. No
 4. Don't know

78. Do you belong to an animal or outdoor club?

CLUB 19:3

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 78)
- 2. Yes
- 3. No
- 4. Don't know

79. Would you join a club that helped you learn more about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live there?

JCLUB 19:4

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 79)
- 2. Yes
- 3. No
- 4. Don't know

80. Would you join a club that helped you learn more about fishing?

FCLUB 19:5

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 80)
- 2. Yes
- 3. No
- 4. Don't know

81. Would you like to learn more in your school class about South Carolina's rivers, ponds, lakes or streams and the animals and plants that live there?

LSC 19:6

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 81)
- 2. Yes
- 3. No
- 4. Don't know

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82. Would you like to learn more in your school class about fishing?

LF 19:7

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 82)
 2. Yes
 3. No
 4. Don't know

SKIP TO QUESTION 84

=====

83. YOU DID NOT USE SPACE BAR

NOSPAC9

PRESS ENTER TO TRY AGAIN

84. Who do you think is the state agency responsible for managing and conserving fish and wildlife in South Carolina?

(DNR LIST; CHECK ALL THAT APPLY)

AGENCY 19:8-17

(CHECK ALL THAT APPLY)

1. South Carolina Department of Natural Resources
 2. Inaccurate derivative of SCDNR
 3. SC Dept. of Parks, Recreation and Tourism
 4. SC Forestry Commission
 5. SC Dept. of Agriculture
 6. U.S. Fish and Wildlife Service
 7. U.S. Forest Service
 8. National Park Service
 9. Don't know
 10. Other

IF (#84 = 0) GO TO #83

IF (#84 @ 10) GO TO #85

SKIP TO QUESTION 86

=====

85. ENTER OTHER STATE AGENCY IN SOUTH CAROLINA.

AGENCYST 20:1-120

86. For your information, the South Carolina Department of Natural Resources provides a number of fishing programs, such as "Hooked on Fishing," the "Fishing Tackle Loaner Program," and "South Carolina Reel Kids" to name a few. Have you heard of any of these programs?
PROGRAMS 21:1

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 86)
- 2. Yes, I have
- 3. No, I haven't
- 4. Don't know

87. For the next group of questions, I would like for you to tell me what you know about wildlife. For any of these questions, it is better for you to say you don't know than to give a wrong answer
HABITAT

Please press ENTER to continue...

88. What does the word habitat mean?
(ENTER RESPONSE IN FIRST PERSON; 120 CHARACTERS)
HABIT 22:1-120

SKIP TO QUESTION 90

=====

89. YOU DID NOT USE SPACE BAR

NOSPAC10

PRESS ENTER TO TRY AGAIN

90. What kind of food do largemouth bass eat?
(DNR LIST; CHECK ALL THAT APPLY)

TROUT 23:1-7

(CHECK ALL THAT APPLY)

- 1. CORRECT ANSWER: Other fish - Bream
- 2. Seaweed
- 3. Lilies and water grasses
- 4. Bugs
- 5. Worms
- 6. Don't know
- 7. Other

IF (#90 = 0) GO TO #89

IF (#90 @ 7) GO TO #91

SKIP TO QUESTION 93

=====

91. ENTER OTHER FOOD THAT LARGEMOUTH BASS EAT.

TROUTST 24:1-120

SKIP TO QUESTION 93

=====

92. YOU DID NOT USE SPACE BAR

NOSPAC11

PRESS ENTER TO TRY AGAIN

93. What does a River Otter usually eat?
(DNR LIST; CHECK ALL THAT APPLY)

OTTER 25:1-7

(CHECK ALL THAT APPLY)

- 1. CORRECT ANSWER: Fish and frogs
- 2. Turtles
- 3. Nuts and grains
- 4. Bugs
- 5. Lilies and water grasses
- 6. Don't know
- 7. Other

IF (#93 = 0) GO TO #92

IF (#93 @ 7) GO TO #94

SKIP TO QUESTION 96

=====

94. ENTER OTHER TYPE OF FOOD A RIVER OTTER EATS.

OTTERST 26:1-120

SKIP TO QUESTION 96

=====

95. YOU DID NOT USE SPACE BAR

NOSPAC12

PRESS ENTER TO TRY AGAIN

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96. What type of food do sharks usually eat?
 (If answer fish: probe for saltwater vs. freshwater)
 (DNR LIST; CHECK ALL THAT APPLY)

SHARK 27:1-8

(CHECK ALL THAT APPLY)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | 1. CORRECT ANSWER: Saltwater fish (see list of fish) |
| <input type="checkbox"/> | 2. Freshwater fish |
| <input type="checkbox"/> | 3. People/Humans |
| <input type="checkbox"/> | 4. Dolphins |
| <input type="checkbox"/> | 5. Whales |
| <input type="checkbox"/> | 6. Squid/Octopuses |
| <input type="checkbox"/> | 7. Don't know |
| <input type="checkbox"/> | 8. Other |

IF (#96 = 0) GO TO #95

IF (#96 @ 8) GO TO #97

SKIP TO QUESTION 98

=====

97. ENTER OTHER FOOD THAT SHARKS EAT.

SHARKST 28:1-120

98. Great, we're just about through. Just a few for question to gather background information.

DEMO

Please press ENTER to continue...

99. Do you consider where you live to be a big city, a suburban area, a small city, or a rural area?

RESIDE 29:1

(CHECK ONLY ONE ANSWER)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | 1. Invalid answer. Select another. (GO TO QUESTION 99) |
| <input type="checkbox"/> | 2. Big city or urban area |
| <input type="checkbox"/> | 3. Suburb of large metro area |
| <input type="checkbox"/> | 4. Small city/town |
| <input type="checkbox"/> | 5. Rural area |
| <input type="checkbox"/> | 6. DNR: Don't know |
| <input type="checkbox"/> | 7. DNR: Refused |

100. What grade in school are you in?

EDU 29:2-3

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 100)
- 2. 1st
- 3. 2nd
- 4. 3rd
- 5. 4th
- 6. 5th
- 7. 6th
- 8. 7th
- 9. 8th
- 10. 9th
- 11. 10th
- 12. 11th
- 13. 12th
- 14. Not in school
- 15. College
- 16. DNR: Don't know
- 17. DNR: Refused

101. Are you of Hispanic or Latino ethnicity?

HISPAN 29:4

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 101)
- 2. Yes
- 3. No
- 4. DNR: Don't know
- 5. DNR: Refused

102. What race do you consider yourself?

(Read list as necessary)

RACE 29:5

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 102)
- 2. American Indian or Alaska native
- 3. Black or African American
- 4. Asian
- 5. Native Hawaiian or other Pacific Islander
- 6. White
- 7. Other
- 8. DNR: Don't know
- 9. DNR: Refused

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103. (ASK IF NECESSARY)

And what is your gender?

GENDER 29:6

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 103)
 2. Male
 3. Female
 4. Refused to say

104. May I ask your age?

(ENTER 999 FOR DON'T KNOW; ENTER 888 FOR REFUSED)

AGE 29:7-9

|_|_|_|

LOWEST VALUE = 1

IF (#104 > 15) GO TO #105

SKIP TO QUESTION 108

=====

105. Have you purchased a South Carolina fishing license?

HAVEYOU 29:10

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 105)
 2. Yes (GO TO QUESTION 106)
 3. No
 4. Don't know

SKIP TO QUESTION 108

=====

106. What type of South Carolina fishing license did you buy?

TYPEL 29:11

(CHECK ONLY ONE ANSWER)

1. Invalid answer. Select another. (GO TO QUESTION 106)
 2. Combination fishing, hunting, and big game
 3. Resident fishing
 4. Resident junior outdoorsman
 5. Don't know

107. Does the fact that you are required to buy a fishing license keep you from buying a license and going fishing?

HAVELIC 29:12

(CHECK ONLY ONE ANSWER)

- 1. Invalid answer. Select another. (GO TO QUESTION 107)
- 2. Yes
- 3. No
- 4. Don't know

108. That's the end of the questionnaire, thank you very much for your time and cooperation!

(ENTER ANY ADDITIONAL COMMENTS; IN FIRST PERSON; 120 CHARACTERS)

END 30:1-120

109. TIME INTERVIEW WAS COMPLETED

ENDTIME 31:1-5

|_|_|_|_|_|_|_|_|_|

110. Please enter your initials in LOWERCASE ONLY!

INTVRINT 31:6-8

|_|_|_|_|

111. Enter the area code and telephone number of number dialed.

TELEPHON 31:9-18

|_|_|_|_|-|_|_|_|_|-|_|_|_|_|_|_|_|_|

LOWEST VALUE = 1

112. SAVE OR ERASE INTERVIEW.

DO NOT ERASE A COMPLETED INTERVIEW!

FINISH 31:19

(CHECK ONLY ONE ANSWER)

- 1. Save answers (GO TO QUESTION 114)
- 2. Erase answers
- 3. Review answers (GO TO QUESTION 3)

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113. ARE YOU SURE YOU WANT TO ERASE THIS INTERVIEW?

ONLY ERASE IF: Terminated (record on back),
RF, BZ, NA, DS, BG, DL, AM

MAKESURE 31:20

(CHECK ONLY ONE ANSWER)

__	1. No, do not erase the answers	(GO TO QUESTION 112)
__	2. Yes, erase this interview	

114. Date call was made

INTVDAT 31:21-28

__	__	__	__	-	__	__	-	__	__
Year					Month			Day	

SAVE IF (#112 = 1)

APPENDIX

Q88. What does the word habitat mean?	NUMBER OF RESPONSES	PERCENT OF RESPONSES
A CERTAIN PLACE WHERE ANIMALS LIVE	1	0.1
A ENVIRONMENT THAT A SPECIES LIVE IN	1	0.1
A FOREST OR A PLACE WHERE ANIMALS LIVE	1	0.1
A HOME FOR AN ANIMAL	1	0.1
A HOME FOR THE ANIMALS	1	0.1
A HOME FOR WILD LIFE	1	0.1
A HOME OF AN ANIMAL OR A PLANT	1	0.1
A HOME OF ANIMALS, WHERE THEY LIVE AND BREED	1	0.1
A HOME OR PLACE OF ANIMALS AND OTHER WILDLIFE.	1	0.1
A HOME TO A BUNCH OF ANIMALS	1	0.1
A HOME TO DIFFERENT KINDS OF ANIMALS	1	0.1
A HOME TO DIFFERENT TYPES OF ANIMALS	1	0.1
A PLACE AN ANIMAL LIVES AROUND	1	0.1
A PLACE FOR PEOPLE OR ANIMALS TO LIVE	1	0.1
A PLACE IN WHICH A GROUP OF ANIMALS LIVE	1	0.1
A PLACE IN WHICH AN ANIMAL LIVES; IT'S ENVIRONMENT	1	0.1
A PLACE OR AN AREA WHERE AN ANIMAL LIVES	1	0.1
A PLACE OR HOME FOR AN ANIMAL	1	0.1
A PLACE OR SURROUNDING THAT AN ANIMAL LIVES IN	1	0.1
A PLACE THAT AN ANIMAL HAS ADAPTED TOO	1	0.1
A PLACE THAT AN ANIMAL LIVES OR IS USUALLY FOUND IN	1	0.1
A PLACE TO LIVE	1	0.1
A PLACE TO LIVE IN	1	0.1
A PLACE TO LIVE, WHERE THE ANIMAL CAN HAVE PROTECTION FROM THE RAIN, THE THUNDERSTORMS, OTHER DANGEROUS ANIMALS, HUNTERS	1	0.1
A PLACE WERE ANIMALS LIVE.	1	0.1
A PLACE WERE VARIOUS LIFE FORMS LIVE TOGETHER AND INTERACT	1	0.1
A PLACE WHERE A CERTAIN ANIMAL PREFERS TO LIVE	1	0.1

A PLACE WHERE A COMMUNITY OF ANIMALS LIVE TOGETHER	1	0.1
A PLACE WHERE A GROUP OF ANIMALS LIVE, LIKE THE WOODS	1	0.1
A PLACE WHERE A GROUP OF ANIMALS LIVE.	1	0.1
A PLACE WHERE A MAMMAL OR CERTAIN ANIMAL OR THING LIVES	1	0.1
A PLACE WHERE A N ANIMAL LIVES	1	0.1
A PLACE WHERE A SPECIES LIVES	1	0.1
A PLACE WHERE AN ANIMAL CAN LIVE	1	0.1
A PLACE WHERE AN ANIMAL IS FOUND IN NATURE	1	0.1
A PLACE WHERE AN ANIMAL LIVES	1	0.1
A PLACE WHERE AN ANIMAL LIVES	1	0.1
A PLACE WHERE AN ANIMAL LIVES AND HOW IT LIVES	1	0.1
A PLACE WHERE AN ANIMAL LIVES AND ITS SURROUNDINGS	1	0.1
A PLACE WHERE AN ANIMAL LIVES, IF THERE IT'S TREES OR SALT/FRESHWATER, IF IT'S IN A LAKE, ETC.	1	0.1
A PLACE WHERE AN ANIMAL LIVES, ITS SURROUNDING AREA	1	0.1
A PLACE WHERE AN ANIMAL LIVES, THEIR SURROUNDINGS	1	0.1
A PLACE WHERE AN ANIMAL LIVES, WHERE IT HAS WHAT IT NEEDS	1	0.1
A PLACE WHERE AN ANIMAL LIVES...AND THE STUFF AROUND IT	1	0.1
A PLACE WHERE AN ANIMAL OR HUMAN BEING LIVES	1	0.1
A PLACE WHERE AN ANIMAL OR ORGANISM LIVES; IT'S SURROUNDINGS	1	0.1
A PLACE WHERE AN ANIMAL OR PERSON LIVES	1	0.1
A PLACE WHERE AN ANIMAL OR PLANT LIVES	1	0.1
A PLACE WHERE AN ANIMAL OR THING LIVES	1	0.1
A PLACE WHERE AN ORGANISM OR ANIMAL LIVES OR OCCUPIES	1	0.1
A PLACE WHERE ANIMAL AND PLANTS INTERACT AND LIVE	1	0.1
A PLACE WHERE ANIMAL LIVE	1	0.1
A PLACE WHERE ANIMAL LIVES	1	0.1
A PLACE WHERE ANIMAL LIVES AND HAVE SHELTER, FOOD, AND WATER	1	0.1
A PLACE WHERE ANIMALS AND PLANTS LIVES	1	0.1

A PLACE WHERE ANIMALS AND THINGS LIVE	1	0.1
A PLACE WHERE ANIMALS LIVE AND HOW THEY LIVE	1	0.1
A PLACE WHERE ANIMALS LIVE- THEIR HOME	1	0.1
A PLACE WHERE ANIMALS LIVE; AREA IT NEEDS TO SURVIVE	1	0.1
A PLACE WHERE ANIMALS OR PEOPLE LIVE	1	0.1
A PLACE WHERE ANIMALS, PLANTS, AND OTHER WILDLIFE LIVE	1	0.1
A PLACE WHERE CERTAIN ORGANISMS OR ANIMALS LIVE.	1	0.1
A PLACE WHERE CREATURE LIVES	1	0.1
A PLACE WHERE DIFFERENT ANIMALS LIVE.	1	0.1
A PLACE WHERE GROUPS OF ANIMALS LIVE	1	0.1
A PLACE WHERE PEOPLE, ANIMALS, AND OTHER THINGS LIVE	1	0.1
A PLACE WHERE PLANTS AND ANIMALS LIVE	1	0.1
A PLACE WHERE PLANTS AND ANIMALS LIVE AND PROVIDES WHAT THEY NEED.	1	0.1
A PLACE WHERE PLANTS AND ANIMALS LIVE, AND PEOPLE	1	0.1
A PLACE WHERE SOMEONE LIVES	1	0.1
A PLACE WHERE SOMETHING LIVES OR ADAPTS	1	0.1
A PLACE WHERE SOMETHING LIVES, IT'S NATURAL PLACE	1	0.1
A PLACE WHERE SOMETHING LIVES.	1	0.1
A PLACE WHERE THE ANIMALS LIVE AND SURVIVE, THEIR NATURAL HABITAT.	1	0.1
A PLACE WHERE THINGS LIVE	1	0.1
A PLACE WHERE YOU LIVE.	1	0.1
A SPECIFIC AREA THAT AN ANIMAL IS INDIGENOUS TOO	1	0.1
A SURROUNDING WHERE AN ANIMAL LIVES	1	0.1
A THING THAT PEOPLE AND ANIMALS DO A LOT	1	0.1
A TYPE OF HOME	1	0.1
A TYPE OF PLACE WHERE ANIMALS LIVE	1	0.1
A WILD ANIMAL'S ENVIRONMENT	1	0.1
AN ANIMAL GOES TO HIBERNATE	1	0.1
AN ANIMALS ENVIRONMENT	1	0.1
AN ANIMAL'S HOME	1	0.1
AN ANIMALS HOME OR SURROUNDING	1	0.1
AN ANIMAL'S HOME--WHERE THEY LIVE	1	0.1
AN ANIMAL'S NATURAL HOME	1	0.1
AN ANIMALS NATURAL PLACE	1	0.1
AN ANIMAL'S SURROUNDINGS	1	0.1

AN AREA IN WHICH AN ANIMAL LIVES	1	0.1
AN AREA IN WHICH YOU LIVE	1	0.1
AN AREA WHERE SPECIFIC SPECIES LIVE	1	0.1
AN ENVIRONMENT IN WHICH AN ANIMAL LIVES.	1	0.1
AN ENVIRONMENT OF WHERE ANIMALS LIVE.	1	0.1
AN ENVIRONMENT WHERE AN ANIMAL LIVES, THEIR HABITAT	1	0.1
AN ENVIRONMENT WHERE ANIMALS LIVE	1	0.1
AN ENVIRONMENT WHERE ANIMALS WOULD LIVE IN, WHICH WOULD BE THERE HOME	1	0.1
AN ENVIRONMENT WHERE SOMEONE OR ANIMAL LIVE	1	0.1
AN ENVIRONMENT WITH LOTS OF SURROUNDINGS	1	0.1
AN ENVIRONMENT, WHERE THEIR HOME IS AND WHERE THEY EAT	1	0.1
ANIMAL LIFE	1	0.1
ANIMAL SURROUNDINGS	1	0.1
ANIMAL SURROUNDINGS AND WHERE THEY LIVE	1	0.1
ANIMAL/PLANT WHERE THEY LIVE	1	0.1
ANIMALS	1	0.1
ANIMALS ARE ADAPTED TO IT	1	0.1
ANIMALS' ENVIRONMENT	1	0.1
ANIMAL'S HOME	1	0.1
ANIMALS HOME; WHERE IT LIVES	1	0.1
ANIMALS IN THE WILD	1	0.1
ANIMALS IN THE WILD NEED TO STAY FREE AND STAY WITH THEIR OWN KIND IN THE FOREST.	1	0.1
ANIMALS LIVING IN A CERTAIN AREA	1	0.1
ANIMALS OR SPECIES NATURAL ENVIRONMENT	1	0.1
ANIMAL'S PLACE THAT THEY LIVE. THE NATURAL ENVIRONMENT	1	0.1
ANY PLACE WHERE A GROUP OF ANIMALS LIVE	1	0.1
AREA AROUND WHERE A GROUP OF ANIMALS LIVE	1	0.1
AREA IN WHICH AN ANIMAL LIVES.	1	0.1
AREA THEY LIVE IN	1	0.1
AREA WHERE ANIMALS AND STUFF LIVE	1	0.1
BEAR GOING TO SLEEP FOR A LONG TIME	1	0.1
CAMOUFLAGE, IT PROTECTS ITSELF, HOW IT LIVES	1	0.1
COMMUNITY A PLANT OR ANIMAL LIVES IN	1	0.1

DESCRIBES WHERE AN ANIMAL LIVES AND THE LAND SURROUNDING IT	1	0.1
DON'T KNOW	1	0.1
DON'T KNOW	1	0.1
DON'T' KNOW	1	0.1
DON'T REMEMBER	1	0.1
ECOSYSTEM OR WHERE ANIMAL LIVES	1	0.1
ENVIRONMENT AROUND SUBJECT	1	0.1
ENVIRONMENT FOR ANIMALS	1	0.1
ENVIRONMENT IN WHICH THE ANIMALS LIVE IN	1	0.1
ENVIRONMENT OF A PERSON OR THING	1	0.1
ENVIRONMENT THAT AN ANIMAL LIVES IN	1	0.1
ENVIRONMENT THAT ANIMALS LIVE IN	1	0.1
ENVIRONMENT WERE ANIMALS LIVE	1	0.1
ENVIRONMENT WHERE ANIMALS LIVE	1	0.1
ENVIRONMENT WHERE CERTAIN ANIMALS LIVE WITH CERTAIN WAYS OF LIFE	1	0.1
ENVIRONMENT WHERE PLANTS ANIMALS LIVE TOGETHER	1	0.1
ENVIRONMENT; THE PLACE WHERE ANIMALS LIVE	1	0.1
FORESTRY AROUND AN AREA	1	0.1
HABITAT MEANS THE RESOURCES, WHAT KIND OF FOOD, THEIR HEARTS	1	0.1
HOME FOR AN ANIMAL	1	0.1
HOME FOR THE ANIMALS	1	0.1
HOME OF AN ANIMAL	1	0.1
HOME OR SURROUNDING OF SPECIES	1	0.1
HOME WHERE THE ANIMALS LIVE	1	0.1
I CAN'T REMEMBER	1	0.1
I DON'T KNOW	1	0.1
I DON'T KNOW.	1	0.1
I DON'T REALLY KNOW	1	0.1
I FORGET	1	0.1
I'M NOT SURE	1	0.1
IT MEANS AN ENVIRONMENT WHERE AN ANIMAL WOULD LIVE	1	0.1
IT MEANS LIKE WHERE YOU LIVE THE STUFF AROUND YOU	1	0.1
IT MEANS WHERE A CERTAIN ANIMAL LIVES	1	0.1
ITS A PLACE WHERE THE ANIMALS LIVE	1	0.1
IT'S A SPECIAL PLACE THAT CERTAIN ANIMALS AND PLANTS LIVE IN	1	0.1
IT'S HOME FOR AN ANIMAL	1	0.1
IT'S LIKE THE AREA THAT AN ANIMAL LIVES IN	1	0.1

ITS WHEN THE ANIMAL HAS TO GET USED TO WHERE IT LIVES	1	0.1
ITS WHERE A ANIMAL LIVES	1	0.1
IT'S WHERE A CERTAIN ANIMAL LIVES AND INTERACTS WITH OTHER ANIMALS FOR A GOOD LIVING THERE	1	0.1
IT'S WHERE ANIMALS LIVE OR SOMETHING	1	0.1
ITS WHERE THE ANIMALS LIVE	1	0.1
IT'S YOUR SHELTER, YOUR HOME	1	0.1
JUST A HOME, WHERE SOMEBODY LIVES, THERE NATURAL SURROUNDINGS	1	0.1
KIND OF ANIMAL	1	0.1
LAND THAT'S AROUND THE ANIMALS AND THE ADAPTATIONS THAT THE ANIMALS HAVE ACQUIRED TO THAT AREA.	1	0.1
LIKE A PORTION OF LAND WHERE ANY WILDLIFE LIVES	1	0.1
LIKE SOMETHING WHERE AN ANIMAL LIVES	1	0.1
LIKE THE ENVIRONMENT WHERE AN ANIMAL LIVES	1	0.1
LIKE THE HOME	1	0.1
LIKE THEIR ADAPTATION TO THERE SURROUNDINGS	1	0.1
LIKE WHERE THE ANIMALS LIVE	1	0.1
LIKE WHERE THEY LIVE	1	0.1
LIVES THERE	1	0.1
LIVING AREA OF ANIMALS	1	0.1
LIVING SPACE	1	0.1
LIVING SPACE FOR ANIMALS	1	0.1
LOTS OF LAKES AND RIVERS	1	0.1
NATURAL ENVIRONMENT	1	0.1
NATURAL SURROUNDING FOR AN ANIMAL	1	0.1
NATURE OF WHERE THE ANIMALS LIVE	1	0.1
NO CLUE	1	0.1
NOT REAL SURE	1	0.1
OUT IN THE WILDERNESS	1	0.1
OUTDOORS WHERE THINGS ADAPT AND LIVE	1	0.1
OUTDOORS, BIRDS, ANIMALS	1	0.1
OUTDOORS, DAMS FOR BEAVERS	1	0.1
PLACE FOR AN ANIMAL LIVES	1	0.1
PLACE OF LIVING FOR DIFFERENT BEINGS	1	0.1
PLACE OR AREA WHERE WILDLIFE LIVE AND COEXIST	1	0.1
PLACE OR SURROUNDINGS THE ANIMAL LIVES IN THEIR ENVIRONMENT	1	0.1

PLACE THAT THE ANIMAL LIVES AND ITS HOME	1	0.1
PLACE WERE AN ANIMAL LIVES	1	0.1
PLACE WERE ANIMALS AND ORGANISMS LIVE	1	0.1
PLACE WERE ANIMALS LIVE AND FEEL SAFE	1	0.1
PLACE WHERE A CREATURE LIVES	1	0.1
PLACE WHERE AN ANIMAL LIVES]	1	0.1
PLACE WHERE AN ANIMAL OR PERSON LIVES	1	0.1
PLACE WHERE AN ANIMAL OR PLANT LIVES WHERE THEY GET ENOUGH WATER AND OXYGEN	1	0.1
PLACE WHERE AN ANIMAL OR SOMEONE MAY LIVE	1	0.1
PLACE WHERE ANIMAL ADAPTS TO LIVING	1	0.1
PLACE WHERE ANIMAL LIVES	1	0.1
PLACE WHERE ANIMAL LIVES,	1	0.1
PLACE WHERE ANIMAL SETTLES	1	0.1
PLACE WHERE ANIMALS AND STUFF LIVE	1	0.1
PLACE WHERE ANIMALS LIVE AND GROW	1	0.1
PLACE WHERE ANIMALS LIVE AND THE SURROUNDINGS	1	0.1
PLACE WHERE ANIMALS LIVE AND THEY HAVE TO HAVE CERTAIN THINGS	1	0.1
PLACE WHERE ANIMALS LIVE AND THRIVE	1	0.1
PLACE WHERE ANIMALS LIVE IN THE WILD	1	0.1
PLACE WHERE ANIMALS LIVES	1	0.1
PLACE WHERE FISH AND ANIMALS LIVE	1	0.1
PLACE WHERE PLANT AND ANIMALS LIVE	1	0.1
PLACE WHERE SOMETHING LIVES	1	0.1
PLACE WHERE SOMETHING LIVES SORT OF LIKE AN ECOSYSTEM	1	0.1
PLACE WHERE THEY LIVE	1	0.1
PLACE WHERE THINGS LIVE	1	0.1
PLACE WHERE YOU LIVE	1	0.1
PLACE WITH ANIMALS AND ALL ITS SURROUNDINGS	1	0.1
PLACE--A LIVING THINGS HOME	1	0.1
PLACES ANIMALS LIVE	1	0.1
PLACES WHERE ANIMALS LIVE'	1	0.1
SHELTER AND FOOD THAT AN ANIMAL NEEDS TO LIVE AND SURVIVE	1	0.1
SHELTER FOR ANIMALS	1	0.1
SOME WERE YOU LIVE	1	0.1
SOMETHING ANIMALS ALWAYS DO, LIKE HIBERNATING	1	0.1
SOMETHING THAT ANIMALS LIVE IN.	1	0.1

SOMETHING THAT SOMEONE DOES A LOT AND THEY HAVE PROBLEMS STOPPING DOING THAT	1	0.1
SOMETHING YOU DO MORE OFTEN	1	0.1
SOMEWHERE AN ANIMAL LIVES	1	0.1
SOMEWHERE WHERE AN ANIMAL LIVES	1	0.1
SOMEWHERE WHERE ANIMALS LIVE	1	0.1
SOMEWHERE WHERE SOMETHING LIVES	1	0.1
SURROUNDING - WHERE PEOPLE OR ANIMALS LIVE	1	0.1
SURROUNDING AREA OF AN ANIMAL	1	0.1
SURROUNDING OF AN ANIMAL	1	0.1
SURROUNDING OF THE ANIMALS	1	0.1
SURROUNDINGS YOU LIVE IN	1	0.1
THE ANIMAL STAYS IN A CERTAIN ENVIRONMENT	1	0.1
THE ANIMALS LIFE OR SOMETHING LIKE THAT	1	0.1
THE ANIMALS NATURAL SURROUNDINGS	1	0.1
THE ANIMAL'S SURROUNDINGS	1	0.1
THE ANIMALS WHO LIVE OUT IN THE WILD	1	0.1
THE AREA AN ANIMAL LIVES	1	0.1
THE AREA ANIMALS LIVE IN	1	0.1
THE AREA AROUND WHERE AN ANIMAL LIVES AND WHAT IT IS LIKE	1	0.1
THE AREA IN WHICH AN ANIMAL LIVES IN	1	0.1
THE AREA THAT AN ANIMAL OR FISH LIVES IN	1	0.1
THE AREA THAT AN ANIMAL OR PLANT LIVES	1	0.1
THE AREA THAT AN ORGANISM IS LIVING IN	1	0.1
THE AREA WHERE AN ANIMAL LIVES	1	0.1
THE AREA WHERE AN ANIMAL LIVES WHERE IT STAYS IN	1	0.1
THE AREA WITH AN ANIMAL LIVES	1	0.1
THE COMMUNITY OF THE ANIMALS	1	0.1
THE ENVIRONMENT AN ANIMAL OR PLANT LIVES IN	1	0.1
THE ENVIRONMENT AN ANIMAL STAYS IN	1	0.1
THE ENVIRONMENT AROUND AN ANIMAL OR PERSON	1	0.1
THE ENVIRONMENT AROUND AN ANIMAL.	1	0.1
THE ENVIRONMENT FOR THE ANIMALS PLANTS AND FISH	1	0.1
THE ENVIRONMENT IN WHICH AN ANIMAL LIVES.	1	0.1
THE ENVIRONMENT OF AN ANIMAL	1	0.1
THE ENVIRONMENT SOMETHING IS LIVING IN	1	0.1
THE ENVIRONMENT THAT AN ANIMAL LIVES IN	1	0.1

THE ENVIRONMENT THAT AN ANIMAL OR AN ORGANISM LIVES IN	1	0.1
THE ENVIRONMENT THAT SOMETHING LIVES	1	0.1
THE ENVIRONMENT THAT SOMETHING LIVES IN	1	0.1
THE ENVIRONMENT THAT THE ANIMAL LIVES IN	1	0.1
THE ENVIRONMENT WHERE A CERTAIN ANIMAL OR PLANT LIVES	1	0.1
THE ENVIRONMENT WHERE A PERSON OR ANIMAL LIVES	1	0.1
THE ENVIRONMENT WHERE AN ANIMAL LIVES	1	0.1
THE ENVIRONMENT WHERE ANIMALS LIVE...NATURE AND SURROUNDINGS	1	0.1
THE ENVIRONMENT WHICH AN ANIMAL LIVES	1	0.1
THE ENVIRONMENT WHICH AN ANIMAL LIVES IN	1	0.1
THE ENVIRONMENT YOU LIVE IN	1	0.1
THE HOME OF ANIMALS	1	0.1
THE HOME OR THE PLACE WHERE SOMETHING LIVES, WHERE THEY LIVE. THEIR BODIES MADE TO FIT THERE	1	0.1
THE LIVING ENVIRONMENT FOR ANIMALS	1	0.1
THE LIVING ENVIRONMENT FOR ANIMALS AND PLANTS	1	0.1
THE NATURAL PLACE AROUND AN ANIMAL OR PLANT	1	0.1
THE OUTDOORS, NATURE, OUTSIDE, TREES	1	0.1
THE PLACE IN WHICH AN ANIMAL, PLANT OR HUMAN LIVES	1	0.1
THE PLACE OR ENVIRONMENT IN WHICH AN ANIMAL LIVES	1	0.1
THE PLACE OR TERRITORY WHERE AN ANIMAL LIVES	1	0.1
THE PLACE SURROUND YOU	1	0.1
THE PLACE THAT THE ANIMALS LIVE IN	1	0.1
THE PLACE WHERE AN ORGANISM LIVES	1	0.1
THE PLACE WHERE AN ANIMAL LIVES AND THE PLACES SURROUNDING IT	1	0.1
THE PLACE WHERE ANIMALS LIVE, SUCH AS IN TREES AND WATER	1	0.1
THE PLACE WHERE ANIMALS LIVE, SURROUNDING AREAS	1	0.1
THE PLACE WHERE IT IS	1	0.1
THE PLACE WHERE PLANTS AND ANIMALS LIVE	1	0.1
THE PLACE WHERE THE ANIMAL LIVES	1	0.1

THE PLACE WHERE THE ANIMAL LIVES AND HOW IT LIVES	1	0.1
THE PLACE WHERE THE ANIMAL LIVES...THE WILDLIFE	1	0.1
THE PLACE WHERE THINGS LIVE, THEIR SURROUNDING AREAS	1	0.1
THE SURROUNDING AREAS OF AN ANIMAL	1	0.1
THE SURROUNDING LAND AROUND YOU WHICH ANIMALS LIVE	1	0.1
THE SURROUNDING WHERE SOMETHING LIVES	1	0.1
THE SURROUNDINGS OF A CERTAIN ANIMAL, WHAT KINDS OF THINGS THEY LIVE AROUND	1	0.1
THE SURROUNDINGS OF AN ANIMAL	1	0.1
THE SURROUNDINGS THAT AN ANIMAL LIVES IN	1	0.1
THE TERRITORY OR THE PLACE WHERE AN ANIMAL LIVES	1	0.1
THE THINGS AROUND ME AND THE THINGS THAT I LIVE WITH.	1	0.1
THE THINGS THAT ARE AROUND YOU LIKE THE ANIMALS AND PLANTS ETC...	1	0.1
THE THINGS THAT LIVE THERE	1	0.1
THE WAY AN ANIMAL LIVES	1	0.1
THE WAY YOU LIVE	1	0.1
THE WILDLIFE	1	0.1
THE WORLD AROUND	1	0.1
THEIR HOME	1	0.1
THEY WAY THEY DO THINGS	1	0.1
TO ADAPT TO A LIVING SPACE	1	0.1
TO SLEEP A LONG TIME	1	0.1
UH I DON'T KNOW	1	0.1
UM... DIFFERENT FISH AND ANIMALS RELY ON DIFFERENT THINGS	1	0.1
WERE AN ANIMAL LIVE	1	0.1
WERE AN ANIMAL LIVES	1	0.1
WERE AN ANIMAL LIVES, ITS SURROUNDINGS, FOOD, SHELTER AND WATER THAT IT NEEDS	1	0.1
WERE THE ANIMALS LIVE AND THEIR HOMES	1	0.1
WHAT IS AROUND YOU	1	0.1
WHAT THE ANIMAL LIVES	1	0.1
WHAT THE ANIMAL LIVES IN	1	0.1
WHAT THE ANIMALS DO IN THE ENVIRONMENT	1	0.1
WHAT THE ANIMALS LIVE IN; LIKE THEIR PLACE	1	0.1
WHAT THEY DO	1	0.1

WHAT'S AROUND THE ANIMAL; WHAT IT LIVES IN	1	0.1
WHEN ANIMALS GO TO SLEEPING THE WINTER THEY DON'T WAKE UP	1	0.1
WHEN IT'S WINTER, THE ANIMALS SLEEP THERE	1	0.1
WHEN ONE FISH DOES SOMETHING TO ANOTHER FISH	1	0.1
WHEN SOMETHING OR SOMEBODY IS HURTING SOMETHING	1	0.1
WHERE A BUNCH OF ANIMALS AND PLANTS LIVE	1	0.1
WHERE A CERTAIN TYPE OF ANIMAL PREFERS TO LIVE	1	0.1
WHERE A CREATURE LIVES	1	0.1
WHERE A CREATURE LIVES.	1	0.1
WHERE A FISH OR ANIMAL LIVES	1	0.1
WHERE A FISH OR SOMETHING WOULD LIVE	1	0.1
WHERE A GROUP OF ANIMALS LIVE	1	0.1
WHERE A GROUP OF ANIMALS LIVES	1	0.1
WHERE A GROUP OF ORGANISMS LIVE AND WHAT THEY USE FOR SURVIVAL; THEIR SURROUNDINGS	1	0.1
WHERE A LOT OF ANIMALS LIVE	1	0.1
WHERE ANIMALS AND PLANTS LIVE	1	0.1
WHERE AN ANIMAL DEFENDS IT'S SELF AND WHERE IT LIVES	1	0.1
WHERE AN ANIMAL LIVES	1	0.1
WHERE AN ANIMAL LIVES AND ANIMAL IS MOST COMFORTABLE IN STAYING	1	0.1
WHERE AN ANIMAL LIVES AND BELONGS IN ITS ENVIRONMENT	1	0.1
WHERE AN ANIMAL LIVES AND EATS	1	0.1
WHERE AN ANIMAL LIVES AND EATS.	1	0.1
WHERE AN ANIMAL LIVES AND IT'S SURROUNDINGS	1	0.1
WHERE AN ANIMAL LIVES AND SURVIVES	1	0.1
WHERE AN ANIMAL LIVES AND WHERE IT FINDS FOOD	1	0.1
WHERE AN ANIMAL LIVES ENVIRONMENT	1	0.1
WHERE AN ANIMAL LIVES ITS SURROUNDINGS	1	0.1
WHERE AN ANIMAL LIVES- ITS SURROUNDINGS	1	0.1
WHERE AN ANIMAL LIVES OR HIS HOME	1	0.1
WHERE AN ANIMAL LIVES OR ITS SURROUNDINGS	1	0.1

WHERE AN ANIMAL LIVES OR WHERE A GROUP OF ORGANISMS LIVE	1	0.1
WHERE AN ANIMAL LIVES, LIKE ITS SURROUNDINGS AND STUFF	1	0.1
WHERE AN ANIMAL LIVES, THEIR SURROUNDINGS	1	0.1
WHERE AN ANIMAL LIVES.	1	0.1
WHERE AN ANIMAL LIVES...ITS SURROUNDINGS	1	0.1
WHERE AN ANIMAL OR PLANTS ADAPT TO, WHERE THEY LIVE	1	0.1
WHERE AN ANIMAL OR SOMEBODY LIVES	1	0.1
WHERE AN ANIMAL OR SOMETHING LIVES	1	0.1
WHERE AN NA ANIMAL LIVES	1	0.1
WHERE AN ORGANISM LIVES	1	0.1
WHERE ANIMAL OR PLANTS LIVE OR STAY	1	0.1
WHERE ANIMALS AND OTHER LIVING THINGS INTERACT WITH EACH OTHER.	1	0.1
WHERE ANIMALS AND OTHER WILDLIFE LIVE	1	0.1
WHERE ANIMALS AND PLANTS LIVE	1	0.1
WHERE ANIMALS AND PLANTS LIVE AND DIE	1	0.1
WHERE ANIMALS AND PLANTS LIVE, WHERE THEY GROW UP	1	0.1
WHERE ANIMALS CAN LIVE FREELY.	1	0.1
WHERE ANIMALS CAN RUN FREE OR WILD	1	0.1
WHERE ANIMALS LIVE AND ADAPT	1	0.1
WHERE ANIMALS LIVE AND KNOW WHERE THEY ARE AT!	1	0.1
WHERE ANIMALS LIVE AND THEIR ENVIRONMENT	1	0.1
WHERE ANIMALS LIVE AND WHAT RESOURCES THEY USE	1	0.1
WHERE ANIMALS LIVE, SURROUNDINGS	1	0.1
WHERE ANIMALS LIVE, THE ENVIRONMENT SURROUNDING THEM	1	0.1
WHERE ANIMALS LIVES	1	0.1
WHERE ANIMALS LIVES, LIKE THE CONDITIONS	1	0.1
WHERE ANIMALS OR LIVING THINGS LIVE	1	0.1
WHERE ANIMALS OR PEOPLE LIVE	1	0.1
WHERE ANIMALS STAY	1	0.1
WHERE ANY KIND OF ANIMAL OR SOMETHING LIVES	1	0.1
WHERE BIRDS AND ALL KINDS OF ANIMALS CAN HAVE THEIR NEST AND STUFF	1	0.1
WHERE CERTAIN ANIMALS LIVE	1	0.1
WHERE FISH LIVE	1	0.1

WHERE GROUPS OF THE SAME SPECIES LIVES	1	0.1
WHERE IN ANIMAL LIVES IN THE ENVIRONMENT	1	0.1
WHERE LIKE WILD ANIMALS LIVE	1	0.1
WHERE LIVING THINGS LIVE	1	0.1
WHERE SOMEBODY OR PLANT OR ANIMAL EXISTS OR LIVES	1	0.1
WHERE SOMEONE LIVES OR THEIR SURROUNDINGS	1	0.1
WHERE SOMEONE OR AN ANIMAL LIVES	1	0.1
WHERE SOMETHING LIVES AND IT'S SURROUNDINGS.	1	0.1
WHERE SOMETHING LIVES AND SURROUNDINGS	1	0.1
WHERE SOMETHING LIVES AND THE ENVIRONMENT AROUND IT	1	0.1
WHERE SOMETHING LIVES OR GROWS	1	0.1
WHERE SOMETHING LIVES OR ITS HOME	1	0.1
WHERE SOMETHING LIVES...	1	0.1
WHERE STUFF LIVES AND HOW IT LIVES	1	0.1
WHERE THE ANIMAL LIVES AN IT'S SURROUNDINGS	1	0.1
WHERE THE ANIMAL LIVES THE ENVIRONMENT	1	0.1
WHERE THE ANIMAL LIVES, IT HOME, ENVIRONMENT AND ECOSYSTEM THAT SURROUNDS IT	1	0.1
WHERE THE ANIMAL OR PERSON LIVES	1	0.1
WHERE THE ANIMALS FEEL COMFORTABLE WHERE THEY SLEEP	1	0.1
WHERE THE ANIMALS LIVE AND GROW AND EAT AND LIVE TOGETHER	1	0.1
WHERE THE ANIMALS LIVE AT	1	0.1
WHERE THE ANIMALS LIVE IN	1	0.1
WHERE THE ANIMALS LIVE WHAT KIND OF PLACE IT IS	1	0.1
WHERE THE ANIMALS LIVE.	1	0.1
WHERE THE ANIMALS LIVE; THEIR HOME.	1	0.1
WHERE THE FISH LIVES	1	0.1
WHERE THEY HIBERNATE IN THE WINTER.	1	0.1
WHERE THEY LIVE AND THAT KIND OF STUFF, THEIR SURROUNDINGS, WHERE ANIMALS LIVE AND WHERE HUMANS LIVE	1	0.1
WHERE THEY LIVE AT	1	0.1
WHERE THEY LIVE LIKE LAKES	1	0.1
WHERE THEY LIVE, THE SURROUNDINGS	1	0.1

WHERE WILD ANIMALS LIVE AND THEIR ENVIRONMENT	1	0.1
WHERE WILDLIFE LIVE	1	0.1
WHERE WILDLIFE LIVES	1	0.1
WILD ANIMALS LIVE THERE	1	0.1
WILD NATURES HOMES	1	0.1
WILDERNESS, AND DIFFERENT PLACES LIKE TREES AND LAND	1	0.1
WILDLIFE	1	0.1
WILDLIFE AND ALL THE ANIMALS	1	0.1
WILDLIFE AND ANIMAL'S HOME	1	0.1
WILDLIFE AROUND THE PLACE WHERE YOU LIVE	1	0.1
WILDLIFE IN ITS NATURE	1	0.1
WILDLIFE, KEEPING ANIMALS OUT OF DANGER	1	0.1
YES, SORT OF	1	0.1
YOUR ENVIRONMENT AND WHERE YOU LIVE...YOUR SURROUNDINGS	1	0.1
YOUR ENVIRONMENT AROUND YOU	1	0.1
YOUR ENVIRONMENT OR THE PLACE YOU LIVE	1	0.1
A PLACE ANIMALS OR PEOPLE CAN AND DO LIVE	2	0.2
A PLACE FOR ANIMALS TO LIVE	2	0.2
A PLACE WHERE A CERTAIN ANIMAL LIVES, ITS HOME, WHERE ITS COMFORTABLE	2	0.1
A PLACE WHERE AN ANIMAL LIVE.	2	0.1
A PLACE WHERE AN ANIMAL LIVES	2	0.1
A PLACE WHERE AN ANIMAL LIVES NATURALLY	2	0.1
A PLACE WHERE AN ANIMAL LIVES OR ANYBODY LIVES	2	0.1
A PLACE WHERE CERTAIN ANIMALS LIVE	2	0.2
A PLACE WHERE YOU LIVE	2	0.2
ALL YOUR SURROUNDINGS	2	0.1
AN AREA WHERE ANIMALS LIVE	2	0.1
AN ENVIRONMENT WHICH AN ANIMAL LIVES	2	0.2
AREA THAT SOMETHING LIVES IN	2	0.1
COMMUNITY WHERE ANIMALS LIVE	2	0.1
DON'T KNOW	2	0.2
DON'T KNOW\	2	0.1
ENVIRONMENT AROUND YOU	2	0.2
ENVIRONMENT FOR AN ANIMAL	2	0.2
ENVIRONMENT SOMETHING LIVES IN	2	0.1
HOME FOR ANIMALS	2	0.2
HOW ANIMALS LIVE	2	0.2

I FORGOT	2	0.2
IT'S AN ANIMAL'S HOME	2	0.2
IT'S WHERE SOMETHING LIVES AND WHERE IT ADJUSTS TO THE ENVIRONMENT	2	0.1
IT'S WHERE YOU LIVE	2	0.1
NOT SURE	2	0.2
ONE SPECIES NATURAL ENVIRONMENT SURROUNDING THAT THEY ADAPT TO	2	0.1
OUTDOORS	2	0.2
OUTSIDE	2	0.2
PLACE OR HOW SOMETHING LIVES	2	0.1
PLACE WERE SOMETHING LIVE	2	0.1
PLACE WHERE A COLLECTION OF ANIMALS LIVE.	2	0.1
PLACE WHERE ANIMAL LIVE	2	0.1
PLACE WHERE ANIMALS LIVE.	2	0.1
PLACE WHERE ANIMALS LIVE...THEIR SURROUNDINGS	2	0.2
PLACE WHERE WILDLIFE LIVES	2	0.1
PLACE, SURROUNDINGS WHERE AN ANIMAL LIVES, WHAT RESOURCES ARE THERE	2	0.2
PLACES WHERE ANIMALS LIVE	2	0.1
SHELTER FOR ANIMALS.	2	0.2
SURROUNDINGS FOR AN ANIMAL	2	0.1
SURROUNDINGS IN AN ENVIRONMENT WHERE HUMANS AND ANIMALS LIVE	2	0.2
SURROUNDINGS WHERE AN ANIMAL LIVES	2	0.1
THE AREA IN WHICH AN ANIMAL LIVES	2	0.2
THE AREA SURROUNDING AN ANIMAL	2	0.2
THE AREA THAT AN ANIMAL LIVE IN	2	0.2
THE AREA THAT AN ANIMAL LIVES IN	2	0.2
THE ENVIRONMENT AROUND ANIMALS	2	0.2
THE ENVIRONMENT IN WHICH A CREATURE LIVES	2	0.1
THE ENVIRONMENT THE ANIMAL OR PLANT LIVES IN	2	0.2
THE ENVIRONMENT THEY LIVE IN	2	0.2
THE ENVIRONMENT WHERE A GROUP OF ANIMALS, PLANTS LIVE...AN AREA OF NATURE	2	0.1
THE PLACE WHERE ANIMALS LIVE IN	2	0.1
THE PLACE WHERE THE ORGANISM LIVES	2	0.1
THE SURROUNDING AREA OF WHERE AN ANIMAL LIVES	2	0.1
THE SURROUNDING OR THE PLACE WHERE ANIMALS LIVE.	2	0.1

THE SURROUNDINGS OF ANIMALS AT WHERE THEY LIVE	2	0.2
THE SURROUNDINGS OF THE ANIMAL	2	0.2
THINGS AROUND YOU IN THE WOODS	2	0.1
WERE ANIMALS LIVE	2	0.2
WHERE A ANIMAL LIVES	2	0.2
WHERE A CERTAIN ANIMAL LIVES	2	0.1
WHERE A SPECIES LIVE	2	0.1
WHERE A SPECIFIC SPECIES LIVES	2	0.1
WHERE AN ANIMAL LIVE	2	0.2
WHERE AN ANIMAL LIVES AND ITS SURROUNDINGS	2	0.2
WHERE AN ANIMAL SPENDS MOST OF ITS TIME	2	0.2
WHERE AN ANIMAL STAYS AT OR IS AT HOME.	2	0.1
WHERE ANIMALS LIVE AT	2	0.1
WHERE ANIMALS LIVE DWELLING	2	0.1
WHERE SOMEBODY LIVES	2	0.2
WHERE SOMEONE LIVES	2	0.2
WHERE THE ANIMAL LIVES AND ITS SURROUNDINGS	2	0.2
WHERE THE ANIMAL LIVES AND SURVIVES	2	0.2
WHERE THE ANIMAL LIVES ENVIRONMENT	2	0.1
WHERE THE ORGANISM LIVES	2	0.1
WHERE THINGS LIVE	2	0.2
YOUR SURROUNDING ENVIRONMENT	2	0.2
YOUR SURROUNDINGS	2	0.2
A PLACE WHERE ANIMALS AND PLANTS LIVE	3	0.2
A PLACE WHERE THE ANIMAL LIVES	3	0.2
AN ENVIRONMENT	3	0.2
AN ENVIRONMENT THAT AN ANIMAL LIVES IN	3	0.2
AN ENVIRONMENT WHERE AN ANIMAL LIVES	3	0.3
ANIMALS HOMES	3	0.3
ENVIRONMENT THE ANIMAL LIVES IN	3	0.2
HOME	3	0.3
NO	3	0.3
PLACE WHERE THE ANIMALS LIVE	3	0.2
THE PLACE WHERE ANIMALS LIVE	3	0.2
THE SURROUNDINGS	3	0.3
ANIMALS HOME	4	0.4
ENVIRONMENT	4	0.4
PLACE WHERE SOMETHING LIVES	4	0.4
THE ENVIRONMENT AN ANIMAL LIVES IN	4	0.4
WHERE ANIMAL LIVES	4	0.3
SURROUNDINGS	5	0.4
WHERE ANIMALS LIVE.	5	0.4

A HOME	6	0.5
A PLACE WHERE SOMETHING LIVES	6	0.5
WHERE YOU LIVE	7	0.6
WHERE THEY LIVE	8	0.7
A HOME FOR ANIMALS	9	0.8
THE PLACE WHERE AN ANIMAL LIVES	9	0.8
AN ANIMALS HOME	10	0.9
WHERE THE ANIMAL LIVES	11	1
WHERE THE ANIMALS LIVE	12	1
PLACE WHERE AN ANIMAL LIVES	14	1.2
WHERE SOMETHING LIVES	27	2.3
PLACE WHERE ANIMALS LIVE	31	2.7
A PLACE WHERE ANIMALS LIVE	33	2.9
A PLACE WHERE AN ANIMAL LIVES	35	3.1
I DON'T KNOW	44	3.9
NO ANSWER	54	4.7
WHERE ANIMALS LIVE	63	5.5
WHERE AN ANIMAL LIVES	75	6.5
DON'T KNOW	96	8.4